

NOTES ON SOME MISCELLANEOUS COLEOPTERA,
WITH DESCRIPTIONS OF NEW SPECIES.

By ARTHUR M. LEA, F.E.S., Museum Entomologist.

[*Contribution from the South Australian Museum.*]

[Read October 8, 1914.]

PLATE XVI.

The South Australian Museum having acquired the collection of Coleoptera formed by the late Rev. T. Blackburn, with the exception of the majority of his types,⁽¹⁾ Adelaide entomologists are placed in an exceptionally favourable condition for the rapid and accurate determination of specimens of that immense Order. For several years prior to his decease he had practically confined his descriptive work to the *Scarabæidæ*, but his general collection was steadily on the increase, and contained an enormous number of specimens of many other families. The Museum also has had enormous recent additions from other sources, and before-hand had a rather fine collection, so that many undescribed species are available. I purpose submitting to the Society such of these as I can find time to work up; with comments on previously-described species where such seem desirable.

PSELAPHIDÆ.

PALIMBOLUS FEMORALIS, Lea.

The type of this species was immature. A specimen from the Rev. T. Blackburn's collection, from the Victorian Alps, is evidently normally coloured. It is reddish-castaneous, with the abdomen somewhat darker, its head and prothorax are almost black, and the base and suture of its elytra are stained with piceous. The hairs composing its femoral fascicles are matted together, so that each of these appears as a thin curved extension of the femoral tooth.

In general appearance it is very close to *victoriæ*, but the male characters are very different.

(1) There are, however, immense numbers of co-types (marked as such) in the collection, and for all practical purposes these are as useful as the types.

HISTERIDÆ.

CHLAMYDOPSIS ATRA, n. sp.

Black, tarsi and antennæ reddish, tibiæ usually more or less diluted with red. A few short setæ scattered about at apex of elytra, and apex and sides of prothorax, a small fascicle of somewhat longer setæ on each epaulette.

Head almost vertical; with shallow net-like punctures. Antennæ with basal-joint wide, flat, and curved, club curved and subcylindrical, its tip visible from above when at rest. *Prothorax* strongly transverse, with punctures as on head, both above and below; disc regularly raised to middle from sides, front margin unevenly elevated, sides oblique and feebly increasing in width to base. *Elytra* subquadrate; with a wide transverse depression near base, the depression continued to sides, but towards each side concealed by a raised epaulette, the latter with an oblique impression cutting it off from the base, behind each epaulette a raised process; each side of scutellar region with a flattened slightly-elevated space within the depression, behind the elevated spaces smooth and impunctate, then with feeble striæ turning into net-like punctures, rest of upper-surface with similar punctures, a wide depression on each side about apex; epipleuræ with striæ, all converging to the lateral openings of the basal impression. Pygidium and propygidium large, conjointly convex, and with net-like but very shallow punctures. *Prosternum* with net-like punctures; flattened along middle. *Metasternum* highly polished, sides with irregular punctures, with a narrow median line. *Abdomen* highly polished, the sides with irregular punctures. *Legs* moderately long; tibiæ conspicuously flanged, flange of front tibiæ increasing in width from apex to basal fourth, and then abruptly terminated, of middle pair much the same, but rather less abruptly terminated, and of hind pair still less abruptly terminated. Length, 2 mm.

Hab.—Queensland: Mount Tambourine (A. M. Lea). Type, I. 1300.

In size and colour like *ectatomma*, but elytral depression near base without conspicuous transverse striæ, shoulders, apex of prothorax, and abdomen, etc., different. From *striatella*, to which in some respects it is closer, it differs in the much more conspicuously net-like punctures. *Reticulata* is also allied, but is a paler species, with very different humeral clothing.

A number of specimens were taken in January by means of the sweep net, used on low herbage, ferns, etc., late in the afternoon, and probably other species could be obtained in the same way as they came out to mate. There was a

specimen of the species from Northern Queensland in the collection of the late Rev. T. Blackburn.

LUCANIDÆ.

ÆGUS JANSONI, Boileau.

Pl. xvi., fig. 1.

This species has been taken at the Herberton River and elsewhere in Northern Queensland. Mr. Dodd has chopped several specimens out of the trunks of living trees at Kuranda.

ÆGUS SUBBASALIS, n. sp.

Pl. xvi., figs. 2 and 3.

♂. Black. Tip of abdomen and parts of legs with numerous short pale setæ.

Head about thrice as wide as long; with dense, but irregularly distributed, round punctures, becoming smaller in front. Upper lip narrow, each side appearing as an obtuse tubercle. Mandibles moderately long, surface punctured and shagreened; near base with a strong simple tooth, apical portion circular in section and acutely pointed. *Prothorax* almost twice as wide as long, apex bisinuate, front angles produced, hind ones strongly rounded off, margins finely crenulated; punctures somewhat as on head, on disc smaller and sparser than elsewhere, crowded on sides. *Elytra* about the width of prothorax, parallel-sided to near apex, which is widely rounded, sides narrowly margined; strongly striated, the interstices with distinct punctures, sometimes in rows, the sides with denser and larger punctures. *Under-surface* with coarse punctures in places. *Legs* moderately long; front tibiæ with from four to six strong teeth, and some smaller ones, the other tibiæ each with two acute median teeth and some apical ones. Length (including mandibles), 18-22 mm.

♀. Differs in having much coarser punctures, head less transverse, mandibles much shorter and comparatively stouter, large tooth submedian instead of subbasal, and semidouble; and legs somewhat shorter. Length, 17½-18 mm.

Hab.—Queensland: Cairns (E. Allen), Kuranda (F. P. Dodd and H. J. Carter), Upper Herberton River (C. French), Cape York (H. Elgner). Type, I. 2730.

Much smaller than *jansoni*, mandibles of male without the apical flange of that species, and the basal tooth single, head not shagreened, or only to a slight extent in front, and prothorax of somewhat different shape.

EUCARTERIA, n. g.

♂. *Head* wide, widely bilobed in front. Each eye completely divided by a narrow canthus. Each antenna inserted.

under an apical lobe; scape somewhat longer than funicle, the latter six-jointed; club three-jointed. Palpi slender. Mandibles moderately long, thin but deep; inner side hairy. *Prothorax* transverse, margins crenulate. *Scutellum* transverse. *Elytra* suboblong, apex widely rounded. Intercoxal process of *mesosternum* narrow, feebly grooved. Abdomen short. *Legs* rather long, front tibiæ multi-dentate; tarsi long, claws long, onychium very thin, about one-third the length of claws.

♀. Differs in having head smaller, mandibles much shorter and wider than deep, prothorax smaller and legs shorter, with stouter femora.

The only species known is a beautiful little insect that occurs on flowers in the Dorrigo scrub. It is evidently allied to *Lamprima*, but has four eyes, much thinner mandibles and palpi, very different mesosternal process, spur of front tibiæ simple, etc. *Rhyssonotus*, which also has four eyes, has very different mandibles, antennæ, and mesosternal process. *Cacostomus*, also with four eyes, is perhaps its nearest ally, but has very different mandibles and a scaly body.

EUCARTERIA FLORALIS, n. sp.

Pl. xvi., figs. 4 and 5.

♂. Black or blackish, with a brassy or brassy-green gloss; parts of under-surface, antennæ, palpi, tibiæ, and tarsi reddish, femora flavous; elytra with an oblique flavous vitta from each shoulder to about apical fourth, but not quite touching suture.

Head about twice as wide as long; with dense and rather coarse punctures, surface subtuberculate in places. Mandibles with moderately dense punctures. *Prothorax* about once and one-half as wide as long, strongly convex, apex shallowly emarginate, lateral margins finely crenulated, and widest at about basal third; with scattered punctures of rather small size but sharply defined; with a small round fovea on each side of front of disc. *Scutellum* about twice as wide as long, apex widely rounded; with distinct punctures. *Elytra* parallel-sided to near apex, surface finely wrinkled in places, and with small, scattered punctures. *Femora* stout; front tibiæ strongly dentate externally, the teeth varying in number from six to nine, but the three apical ones always larger than the others, with a strong apical spur; middle tibiæ moderately curved, apex with two spurs, one of which is curved; hind tibiæ with two strong apical spurs; tarsi long, apical-joint (including the claws) as long as the others combined. Length (including mandibles), $7\frac{1}{2}$ -11 mm.

♀. Differs in being smaller (7-8 mm.). Head smaller, with denser and coarser punctures; mandibles short, stout, narrowly keeled at outer edge, and cuspidate at middle of inner edge, with coarse punctures and much sparser hairs. Prothorax with coarser and denser punctures, margins narrower but more strongly crenulated, and discal foveæ feeble. Elytra slightly wider, with stronger and denser punctures and wrinkles; and legs shorter and stouter.

Hab.—New South Wales: Dorrigo (H. J. Carter, from R. J. Tillyard and W. Heron). Type, I. 2729.

The mandibles of the male vary greatly in size, on some specimens they are longer than the head is wide, on others they are scarcely longer than those of the female. Each may be compared to a piece of thin metal that has been irregularly shaped; starting from the front of the head the base is somewhat rounded, then there is a wide curve extending to the apex, with the outer wall almost vertical; from the apex it is curved backwards for about one-fourth its length, where there is a distinct tooth, behind this there is usually a feeble one, and thence to the base it is feebly undulated. When the pair are clenched the right one overlaps the left; the basal third of each almost touch, the apical two-thirds form an elongate-elliptic opening. The elytra in the large males are slightly narrower than the prothorax at its widest, but in the small males they are quite as wide. The hind tibiæ are sometimes scarcely darker than the femora. The front of the head is usually diluted with red.

SCARABÆIDÆ.

ANOPLOGNATHUS CONCINNUS, Blackb.

The type, and a co-type of this species, are simply small specimens of *aneus* from which the metallic-golden lustre has been almost entirely removed; almost certainly through immersion in formalin. I have seen specimens of *mastersi* in exactly the same condition. Also specimens of *Anoplostethus lætus* from which it has been removed in spots. A few years ago Mr. Hacker had many of his Northern Queensland specimens injured in exactly the same manner through placing them in formalin.

RHIPIDOCERIDÆ.

ENNOMETES RUFICORNIS, Gray.

E. lacordairei, Pasc.

Westwood's figure of *Callirhipis ruficornis* given in Cuvier's Animal Kingdom⁽²⁾ renders it quite certain that

(2) Insecta, i., pl. xxxix., fig. 2.

the species is the one subsequently described by Pascoe as *E. lacordairei*.⁽³⁾ Gray's description⁽⁴⁾ is simply "Dark reddish-castaneous; the elytra striated, with broad punctures; antennæ reddish." The locality was given as New South Wales. The late Rev. T. Blackburn surmised this synonymy,⁽⁵⁾ but apparently he had seen the description only and did not know the female.

The antennal rami vary in length in four males⁽⁶⁾ that I refer to the species. The ramus of the third joint on one specimen is scarcely twice the length of the joint itself, in another it is almost thrice the length of the joint; in the others it is intermediate; in the first specimen the tip of the ramus if pressed flat would extend to about the middle of the eighth joint.

ENNOMETES BIFOVEICOLLIS, n. sp.

♂. Dark-brown, antennæ (two basal-joints excepted) and palpi paler. Moderately clothed with short and somewhat silken pubescence, denser and longer on under-surface of femora than elsewhere.

Head somewhat concave, with dense punctures. Antennæ with basal-joint stout, about as long as the distance between eyes, second short, with an obtuse inner projection, third distinctly longer than fourth, third to tenth each with a long ramus of subequal lengths, eleventh distinctly curved, about as long as the ramus of tenth. *Prothorax* moderately transverse, upper-surface strongly rounded in front, with a vague median line terminating near the base in a shallow depression, a strong fovea on each side of middle of disc; with dense punctures. *Elytra* about as wide as prothorax, and almost four times as long, parallel-sided to beyond the middle; with rows of large, deep, transverse punctures, becoming irregular in places; alternate interstices feebly raised, but all with small punctures. Length, 20 mm.

Hab.—Queensland: Claudie River (January, 1914, J. A. Kershaw). Type in National Museum, Melbourne.

Longer than *ruficornis* and almost twice as wide, latero-median foveæ of prothorax much deeper, elytral punctures larger, and apical joint of antennæ more strongly curved, etc. There are eleven rows of large punctures across the middle of each elytron, but near the base there are two

(3) The type of *ruficornis* being a female, and of *lacordairei* a male.

(4) Page 365, not 336, as given in Masters' Catalogue.

(5) These Transactions, 1900, p. 50.

(6) Including one so identified by Mr. Blackburn.

additional scutellar rows; the punctures are also very irregular about the shoulders and apex. The type has its head projecting forward and so leaving the jugular membrane exposed, and also exposing two curious chitinous processes placed behind the eyes; each is concave, and with its hind edge produced into a sharp flat point that projects above the prosternum. Somewhat similar processes are also present on the males of *ruficornis* and of *Callirhipis cardwellensis*, although they are concealed when the head is resting on the prosternum.

CALLIRHIPIS CARDWELLENSIS, Blackb.

Pl. xvi., fig. 6.

The type of this species⁽⁷⁾ is now before me. It is a female. The species is apparently a somewhat variable one, as a second female has the elytral costæ much more pronounced, on the type they are just traceable; the first is joined to the second at about one-fifth from the apex (the space between being longitudinally concave), these are then joined to the fourth half-way to the apex (the space between being also longitudinally concave, but with the third costa running along the middle). The prothorax is strongly rounded in front, with a small and rather deep fovea on each side of the middle of the disc, and a smaller one obliquely between same and the middle of the base.

The male differs from the female in being more opaque (due partly to fine pubescence and partly to density of small punctures) with the antennal rami very long (much longer on some specimens than on others). The discal prothoracic foveæ are decidedly larger and deeper than on the female. The elytral costæ are also variable.

Hab.—Queensland: Cardwell (type), Kuranda, Cairns, Coen River, etc.

CALLIRHIPIS RETICULATA, n. sp.

Pl. xvi., figs. 7 and 8.

♂. Dark-brown, antennæ (two basal-joints excepted) and palpi paler. Rather densely (more sparsely on depressed parts of elytra than elsewhere) clothed with short silken pubescence.

Head with dense punctures; and with a short medio-basal impression. Antennal rami very long. *Prothorax* moderately transverse, strongly rounded in front and overhanging head, base trisinate, with a conspicuous fovea on each side of middle of disc, and a less distinct one between same and

(7) By the courtesy of Mr. Kershaw, of the National Museum, Melbourne.

middle of base, a wide, shallow basal depression towards each side; punctures as on head. *Elytra* very little wider than prothorax, but about four times as long, gradually narrowed posteriorly, each with four irregular longitudinal costiform elevations, connected by numerous irregular transverse or oblique ones; with dense and rather coarse punctures, the interspaces between same with small and not very dense punctures, but becoming denser on the costæ. *Legs* moderately long and thin. Length, 21 mm.

Hab.—Queensland: Kuranda (C. French). Type in National Museum, Melbourne.

In build fairly close to the male of *cardwellensis*, but upper-surface with more conspicuous clothing, and elytra with net-like elevations and much coarser punctures. On the male of that species (on the female they are very different) there are fairly dense punctures of moderate size, the largest being distinctly less than half the width of the sutural interstice, and all the interspaces are crowded with much smaller punctures. On the present species the large punctures are at least half of the width of the sutural interstice, many are quite as wide, and a few are even wider; the interspaces are also much less densely covered with small punctures. The elevated parts are moderately clothed, but the depressed parts are almost glabrous; whereas on the male of *cardwellensis* all parts of the elytra are about equally clothed with short pubescence. The first joint of the antennæ is stout, rounded in front, dilated to apex, and about as long as the distance between the eyes; the second is short, with a short, subtriangular inner projection; the third is about as long as the second, but has a very long ramus (distinctly longer than the prothorax is wide at the base); the fourth to tenth slightly diminish in thickness, but each has a ramus about equal to that of the third; the eleventh joint is about as long as the ramus of the tenth.

A second specimen from Cairns (J. A. Anderson's No. 319) is smaller (16 mm.); its left antenna is broken, but the right (fig. 8) is present and most peculiar. The fourth and fifth joints are distinctly separated internally, but with a long ramus common to both; the sixth and seventh and eighth and ninth are similarly ramose. In other respects, however, it agrees with the type.

PTINIDÆ.

POLYPLOCOTES OVIPENNIS, n. sp.

Black; parts of legs and of antennæ obscurely diluted with red. Middle of sterna, except exact middle of metasternum, and a patch towards each side of basal segment of

abdomen, with dense flavous pubescence; elsewhere very sparsely pubescent, but elytra glabrous, except about base.

Head about twice as wide as long; eyes oblique and prominent. *Antennæ* extending to about basal third of elytra, joints more or less feebly granulated, first stout and somewhat longer than second, second and third somewhat longer than wide, fourth just perceptibly longer than wide, fifth to seventh each about as long as wide, eighth about one-fourth wider than seventh, and once and one-half longer, ninth very little longer than seventh. *Prothorax* as described in *castaneus*. *Elytra* rather widely ovate, strongly convex, base truncate and each side with four small but deep impressions; with regular rows of small punctures, the interstices shining, and sparsely or not at all punctate. Three basal segments of *abdomen* large, their sutures distinct at sides but very feeble across middle; punctures very small and sparse; apical segments very small. *Legs* long; femora moderately stout. Length, 3 mm.

Hab.—Central Australia: Lake Callabonna (A. Zietz). Type, I. 960.

The head in front of the antennæ is invisible from above, strongly sculptured and projecting, with the mandibles further projecting, so that from the sides it appears to be rostrate. From above the second joint of the antennæ appears shorter than the third, but from the sides it is seen to be somewhat longer.

Differs from *longicollis* in having the elytra larger and more ovate, antennæ longer and thinner, with ninth joint considerably longer and much less compressed; in *longicollis* the eighth and ninth joints are so compressed that their width is fully twice their depth; in the present species, while not circular in section, they are certainly not twice as wide as deep.

TENEBRIONIDÆ.

CAMPONOTIPHILUS, n. g.

Head immersed in prothorax almost to front of eyes. Eyes rather large and coarsely faceted. *Antennæ* rather short, joints more or less compressed. Mandibles bifid at apex. *Prothorax* transverse, margins rather wide. *Scutellum* distinct. *Elytra* parallel-sided to near apex, non-striated; epipleuræ fairly wide, with a narrow continuous groove from base to apex. *Prosternum* obtusely ridged along middle, with intercoxal process rather narrow. *Mesosternum* considerably produced in front; intercoxal process narrow posteriorly, dilated in front, and then subtriangularly depressed. *Meta-sternum* rather long, episterna wide. *Abdomen* with first

segment at sides not much longer than second, fourth shortest of all, and rather distinctly produced backwards at sides. *Legs* moderately long; tibiæ feebly bispinose at apex. *Body* winged.

A curious genus, like so many whose species occur in ants' nests; but evidently belongs to the *Ulomides* and near *Uloma* and *Heterocheira*, from which it differs in its explanate prothoracic margins and absence of elytral striation. The apex of the third and fourth abdominal segments is not at all membranous, and this, according to Leconte's classification, would exclude it from the *Ulomides*, but certainly in some Australian genera of that subfamily the membranous tip is either very small or altogether wanting. Leconte also says the trochanter of the middle coxa is sometimes absent and "appears to me rather to be united with the mesosternum than to be absolutely wanting." In his table of the divisions of the *Tenebrionides* he states that in the *Ulomini* the trochanters of the middle coxæ are obsolete. But in the typical genus *Uloma* and in the allied genera *Heterocheira* and *Achthosus*, as also in the present one, a distinct trochanter is visible on every leg. I cannot conceive also how portion of a leg, essentially intermediate between the coxa and femur, can by any possibility be united to the mesosternum.

CAMPONOTIPHILUS FIMBRICOLLIS, n. sp.

Pl. xvi., fig. 9.

Dark reddish-castaneous; shining. Upper-surface very sparsely clothed with short pubescence, becoming slightly longer and fairly distinct on margins of elytra; on margins of prothorax shorter and denser, forming a rather conspicuous fringe.

Head smooth; very minutely and sparsely punctate, gently undulated in front; distance between eyes less than half the width of the head immediately in front of same. *Antennæ* scarcely as long as prothorax is wide at the base, first joint concealed from above, second short, third longest of all, the others to eighth feebly decreasing in length and very feebly increasing in width, eleventh slightly longer than tenth. *Prothorax* almost twice as wide as the median length, rather deeply emarginate in front, front angles rounded off, sides rounded, near base feebly incurved but hind angles rather strongly produced and subacutely pointed, median line short and vague; with minute but fairly dense punctures; margins wide, average width about equal to space between eyes. *Scutellum* transverse, slightly wider than an eye. *Elytra* parallel-sided to near apex, very little wider than base of prothorax, a vague impression near sides at basal third;

punctures very indistinct or absent. Hind *femora* extending almost to middle of third abdominal segment; tarsi rather sparsely setose on under-surface. Length, $8\frac{1}{2}$ - $9\frac{1}{2}$ mm.

Hab.—Western Australia: Beverley, under logs in nests of *Camponotus*, sp. (F. H. du Boulay).

The colour is of an almost even shade throughout, although some specimens are darker than others. From behind the sparse clothing on the disc of the elytra is seen to be in quite regular rows, but from most directions the linear arrangement is not at all evident. The pronotum, except towards the sides, is entirely glabrous, and on some specimens has vague medio-discal, or postero-lateral impressions.

PYROCHROIDÆ.

LEMODES TUMIDIPENNIS, Blair.

This beautiful little insect has been taken in rotting wood by Messrs. H. J. Carter, J. J. Walker, and others at Lilyvale and elsewhere in the Illawarra district, and on the Blue Mountains, and by myself at Mount Tambourine, in Queensland.

LEMODES CÆRULEIVENTRIS, Blair.

Two specimens from the Cairns district (F. P. Dodd and A. M. Lea) appear to belong to this species, but they have a vague impression along the middle of the prothorax. The upper-surface also in addition to the sparse pubescence has fairly numerous erect hairs. One of the specimens has a vague bluish gloss on the upper-surface, but the other is entirely without it.

CANTHARIDÆ.

SITARIDA HOPEI, White.

(?) *Gætymes flavicornis*, Pasc.

The locality originally given for this insect was New Holland, and as specimens were recorded from many parts of Australia in Stokes' "Discoveries in Australia," there was no warrant for recording it from King George Sound, as was done in Masters' Catalogue.

There is in the National (Melbourne) Museum a specimen from Purnong (South Australia) that is possibly *hopei*; it agrees well with the generic description and with the figure, except that the prothorax is more dilated in the middle. But in the description the colours were noted as "Black; elytra slightly pitchy." The specimen under consideration is mostly of a dingy brownish-red, with parts of the head, of sides of prothorax, of legs and of antennæ, and most of the under-surface black or blackish. Its length is 19 lines (the type was 17).

It seems quite possible that *Gætymes flavicornis* is the male of the species. But I am unaware as to whether specimens (which are of the rarest in collections) have ever been taken mating.

SITARIDA SCABRICEPS, n. sp.

Pl. xvi., figs. 10 and 11.

Deep black, elytra partly of a dingy-flavous; tip of abdomen and parts of tarsi of a dingy-red. Rather sparsely clothed with greyish pubescence.

Head moderately transverse, widest near base, base gently emarginate; with dense and rather strong punctures throughout; forehead with numerous small angular processes or tubercles. Eyes each divided into two lobes of uneven sizes. Antennæ rather short, first joint curved, about as long as the four following combined, second and third short, fourth longer and equilaterally triangular, fifth to tenth serrate, eleventh oblique, about half the length of first. *Prothorax* about as long as wide, widest slightly in advance of middle, thence rather strongly narrowed to apex, and feebly diminishing in width to base, basal angles rounded and not at all produced, median line distinct; surface somewhat uneven and with slightly coarser punctures than on head. *Elytra* about as long as head and prothorax combined, each gradually diminishing in width to apex, which is obtusely rounded, with four obtuse costæ; surface shagreened, in places finely rugulose punctate. Length, 8-12½ mm.

Hab.—Tasmania: Hobart, reared in breeding-cages from logs of wood (A. M. Lea). Type, I. 3208.

The colours are apparently much as in *minor*, except that a much greater portion of the elytra is pale⁽⁸⁾; but differs from the description and figure of that species in the head being of different shape and much rougher, third joint even shorter than second, instead of as long as fourth, prothorax of very different shape (especially at the base) and without smooth elevations. The connecting piece between the lobes of each eye is very narrow, but two rows of facets may be traced at the narrowest part. The abdomen has irregularly dried on the three specimens before me; on the under-surface of one it is widely concave along the middle, on another it is longitudinally sulcate, whilst on the third the fourth segment is quite strongly ridged along the middle. Each of them (as also on the three specimens of the following species) has a narrow process projecting from the tip of the abdomen; but

(8) Rather more than half, the dark parts being the apical two-fifths, and a slight amount at the base.

I am unable to state as to whether it is a penis-sheath or the tip of an ovipositor.

SITARIDA QUADRILOBA, n. sp.

Deep black, in places shining. Sparsely clothed with greyish pubescence.

Head rather strongly transverse, dilated from eyes to near base; with dense and rather strong punctures throughout; with a shallow median depression, and one behind each eye, thus dividing the base into four obtuse lobes. Eyes very unevenly divided. Antennæ short, first joint about as long as three following combined, second and third short, fourth stouter and larger, fifth to tenth briefly serrated, eleventh moderately long. *Prothorax* slightly wider than the median length, narrowest at apex and irregularly increasing in width to base, which is wider than head and irregularly lobed; surface somewhat uneven, with a vague longitudinal, and two still more vague transverse impressions; punctures somewhat coarser and more rugose than on head. *Scutellum* narrowly grooved along middle and notched at apex. *Elytra* about as long as head and prothorax combined, sides rather strongly incurved, apex less than half the width of base; densely rugulose punctate, punctures smaller than on head and very small about apex; with three obtuse costæ. Length, 16-18 mm.

Hab.—South Australia: Mount Lofty (S. H. Curnow). Type, I. 3207.

The figure⁽⁹⁾ of *Sitarida minor* will give a good general idea of this insect, but it differs from the description of that species in the entire upper-surface of the head being densely punctate, and nowhere smooth, the third joint of antennæ shorter than the fourth, and prothorax without smooth tubercular elevations. The eyes are almost completely divided, only a single row of facets (invisible from most directions) joining the two lobes. From the preceding species it is sharply distinguished by the shape of the head and prothorax. Two of the three specimens before me have the shoulders feebly diluted with red.

PALÆSTRA RUBRIPENNIS, Cast.

P. quadrifoveata, Fairm.

Tmesidera rufipennis, Westw.

Palæstrida bicolor, White.

I concur with the late Rev. T. Blackburn as to the synonymy of this species, but believe in addition that *bicolor*

(9) Trans. Ent. Soc., Lond., 1895, pl. vi., fig. 11.

belongs to it. There are specimens in the Museum from New South Wales, Tasmania, and South Australia. In Masters' Catalogue *bicolor* was recorded as from King George Sound, but probably in error; in the original description New Holland was the only locality given. Reference to the figure (pl. ii., fig. 1) was also omitted.

ZONITIS.

A curious sexual feature that appears to have been entirely overlooked hitherto⁽¹⁰⁾ is the presence, on the males of many species, of a curious notch on the front femora. On *sedilloti*, *violaceipennis*, and *purpureipennis* it is a simple notch on the upper-surface near the apex. On *bipartita*⁽¹¹⁾ there is also a notch, but a depression is continued for a short distance towards the base from the notch, the depression being visible only from above. On *aspericeps*, *rugosipennis*, and *rostrata*, and to a less extent on *cyanipennis*, the upper-surface from the notch to the base appears to have been pared down, so that near the apex of the femur there appears to be an obtuse tooth projecting backwards. It appears to be almost confined to the species having more or less metallic elytra, although apparently not present on the males of every species having such elytra.

ZONITIS BIZONATA, MacL.

The original description of this species was simply a brief comparison with *apicalis*; but a specimen from Mackay (from the late Rev. T. Blackburn's collection) and two from Palm Island and Cairns (from the Macleay Museum) now before me were so named, and I have no doubt correctly so. The Mackay specimen has the abdomen infusate. All three have the antennæ entirely dark, except the base of the first joint.

Five specimens from the Coen River differ in having the two basal-joints of antennæ entirely pale, and the pale median portion of the elytra of variable extent, but considerably less than on the others, and two of them have the abdomen slightly infuscated. One has the elytral punctures slightly but noticeably stronger than on the others.

The dark parts of the elytra are sometimes of an almost plain black, but usually have a purplish or bluish gloss. On the prothorax there is usually a rather vague subfoveate impression on each side of the disc, but they vary from practically absent to rather conspicuous.

(10) At any rate on Australian species of the genus; and it is not mentioned by Lacordaire.

(11) A non-metallic species.

ZONITIS COWLEYI, Blackb.

A specimen from Cape York, recently taken by Mr. W. D. Dodd, evidently belongs to this species; an unusually distinct one on account of its very large eyes, rostrum-like prolongation of muzzle, and very long palpi. The antennæ are thin and slightly pass the tip of the elytra, the second⁽¹²⁾ joint is, if anything, a trifle longer than the third, but distinctly shorter than the fourth, and the following ones are equal or subequal in length.

ZONITIS SPLENDIDA, Fairm.

Z. gloriosa, Blackb.

Two specimens from the Macleay Museum labelled "Western Australia" agree well with the description of *splendida*. In Blackburn's table⁽¹³⁾ the species was separated from *gloriosa* by the length of the head, but a specimen in the South Australian Museum bearing his name-label "*gloriosa*" agrees well with the ones from the West. The punctures of the prothorax are fairly distinct, but they are certainly fine. On the Western specimens the muzzle is subtriangular in shape, and on the Southern one parallel-sided; but these differences are due solely to the mandibles being tightly clenched on the former, and partly open on the latter.⁽¹⁴⁾ The general shape and colours (both unusual) are identical.

ZONITIS PALLICOLOR, Fairm.

There are specimens of this species in the Museum from Victoria, South and Western Australia. An occasional specimen has the abdomen dark, and such specimens agree with the brief description of *fuscicornis* (described originally from Queensland). If synonymous *fuscicornis* has priority.

ZONITIS HAKEÆ, n. sp.

Black, prothorax flavous-red. Upper-surface glabrous.

Head elongate, widest across eyes, transversely and longitudinally impressed between antennæ; from clypeal suture to apex of labrum almost as long as from same to neck.

(12) Only the two basal joints were on the type.

(13) Although tabulated by Blackburn, it was unknown to him as such. The utility of including in a table species unknown except by description to the author of same has always appeared to me to be undesirable, unless there can be absolutely no doubt as to the correctness of the position assigned to it in such tables.

(14) The sides of the mandibles forming the margins of the muzzle, it naturally follows that the apparent shape of the latter is altered by the opening or shutting of the former, and apparently in many descriptions no allowance has been made for same.

Eyes widely separated, obliquely placed. Antennæ comparatively short and stout, third joint about once and one-half the length of second. *Prothorax* distinctly longer than wide, widest slightly in advance of middle, sides thence strongly narrowed to apex, and gently incurved between same and base; with a vague median line on basal half; with numerous distinct punctures of moderate size. *Elytra* almost parallel-sided except about base and apex; densely, moderately-strongly, and rugosely punctate. Length, 4-11 mm.⁽¹⁵⁾

Hab.—Western Australia: Swan River, on flowers of *Hakea* sp. (A. M. Lea). Type, I. 3209.

In Blackburn's table would be associated with *aspericeps* and *rugosipennis*; from the former it is readily distinguished by its red and differently sculptured prothorax, and more wrinkled but less coarsely punctured elytra. From the varieties of *rugosipennis* with red prothorax it is distinguished by its prothorax being wider at the apex and narrower at the base, elytra very differently sculptured and legs entirely black. *Rostrata*, whose colours are practically identical, differs in having the punctures on the head very much smaller, and on the elytra much larger, second joint of antennæ much shorter and the prothoracic outlines and punctures different. The four specimens before me are exactly alike in colours, except that one has a vague purplish and another a vague greenish gloss on the elytra. The smallest one has a very distinct but rather shallow fovea on each side of the prothorax, slightly nearer the base than apex, but on the others there is scarcely a trace of same. The elytral punctures are not sharply defined in the ordinary way, and the interstices between them have an irregular vermiform appearance.

ZONITIS MELANOPTERA, n. sp.

Of a rather dingy flavous-red; elytra, abdomen, labrum, antennæ, palpi, tarsi, and apex of femora and of tibiæ more or less black; metasternum infuscate on each side. Elytra with very short, fine, ashen pubescence, rest of upper-surface almost glabrous.

Head moderately long, widest across eyes, shallowly impressed from between same to base of rostrum; with clearly defined punctures of moderate size, but irregularly distributed. Eyes moderately large, separation at nearest point about equal to basal-joint of antennæ, hind margin of each almost parallel with adjacent margin of head. Antennæ long, second and third joints equal in length. *Prothorax* distinctly longer

(15) No reliance is to be placed on size as an aid to identification, as the range of variation is great in the majority of species.

than wide, sides oblique between middle and apex, gently incurved between middle and base, median line feeble, a distinct but not very large fovea on each side of middle towards base; with fairly dense and sharply defined punctures of moderate size. *Elytra* rather narrow, with very dense, sharply defined punctures of rather small size, and seldom confluent. Length, $5\frac{1}{2}$ -8 mm.

Hab.—Queensland: Cairns (J. A. Anderson). Type, I. 3210.

In Blackburn's table would be placed in "A" and from all the species of that section the combination of red head, with black, non-metallic elytra, will readily distinguish it. The colours as described are those of three specimens, a fourth has the abdomen and metasternum entirely pale. This specimen in some respects agrees with the description of *semirufa*, but differs in having the head red, prothoracic foveæ nearer base than apex, and second joint of antennæ quite as long as third; the elytral punctures, although distinct, are certainly not "grossis"; *semirufa* was also from the other side of the continent.

var. NIGROTERMINALIS, n. var.

Two specimens (also from Cairns) agree absolutely in all details of sculpture, but differ in having the elytra pale except for about one-third of the apex, the black portion is not straight across, but is narrowest at the suture, then obliquely dilated forward, and then is somewhat rounded to each side. One has the metasternum deeply infuscated; the other has it entirely pale, but each shoulder is feebly infuscated.

These specimens, in Blackburn's table, would be associated with *nigroapicata*, but they differ from the description in having the prothorax non-foveate on sides, and elytra without traces of elevated lines on the disc. They also differ from the description of *carpentariæ* in the third joint of antennæ being no longer than the second, femora partly black, and prothorax and elytra with very distinct punctures. In colours they agree well with the description of those of *apicalis*, but the prothorax is of very different shape, and the elytra are very densely instead of sparingly punctured.

ZONITIS PICTICORNIS, n. sp.

♂. Reddish-flavous, elytra blackish, the suture and sides (except at apex) flavous, antennæ (except base of first joint, apex of third, and base and apex of each of the following ones), parts of palpi, tibiæ, tarsi, and tips of femora more or less blackish. Elytra rather densely clothed with very short pubescence, rest of upper-surface sparsely clothed.

Head short, widest across eyes, distance from clypeal suture to apex of labrum about half as long as from same to prothorax, with a vague median line; with fairly dense and sharply defined, but not very large punctures. Labrum with a distinct median line, and sharply defined punctures. Eyes large, separated less than length of basal-joint of antennæ, and much closer together on lower-surface. Antennæ thin, extending to tip of elytra, third joint somewhat longer than second. *Prothorax* scarcely longer than wide, sides incurved and narrowed between middle and apex, and feebly incurved between middle and base, median line shallow and irregular, a rather feeble impression on each side at apical third; punctures slightly larger than on head, but not so dense. *Elytra* rather narrow; with very dense and rather small, non-confluent punctures. Length, $7\frac{1}{2}$ mm.

Hab.—Queensland: Stewart River (W. D. Dodd). Type, I. 3205.

The third joint of the antennæ is distinctly longer than the fourth, but not very much longer, perhaps one-fourth; but regarding the species as belonging to "A" (in Blackburn's table) it would be associated with *pallicolor* and *obscuripes*, with which it has little in common. But regarding it as belonging to "AA," it would be associated with *carpentariæ*, from which it differs in the elytral suture being pale, prothorax with very conspicuous punctures, and joints of antennæ bicolorous. *Cowleyi* has even larger eyes, much longer head, and differs in many other respects.

ZONITIS METASTERNALIS, n. sp.

Pale-flavous, antennæ (basal-joint excepted) and metasternum blackish, tarsi slightly infuscated. Upper-surface entirely glabrous.

Head short, widest across eyes, with small scattered punctures; clypeal suture very feeble in middle, from same to apex of labrum distinctly shorter than from same to neck. Eyes of moderate size and widely separated. Antennæ thin but rather short, second joint not half the length of third. *Prothorax* slightly longer than wide, sides gently increasing in width from apex to middle, and then still more feebly decreasing in width to near base; without median line; with very sparse and indistinct punctures. *Elytra* moderately wide, very faintly wrinkled; with sparse, small, and vague punctures. Length, $7-8\frac{1}{2}$ mm.

Hab.—Western Australia: Cue (H. W. Brown). Type, I. 3204.

A small and unusually pale species, but with the metasternum dark. The two specimens in the Museum each has the head flattened and irregularly depressed between the eyes and towards the base; but this may have been due to pressure exerted to prevent the head from resting on the breast. Regarding it as natural the species, in Blackburn's table, would be associated with *queenslandica* (whose head is black) and *bipartita* (whose elytra are partly dark). If not natural it would be associated with *longipalpis* and *yorkensis* (whose heads, under-surfaces, and legs are black, and differ in many other particulars). *Helmsi* has much coarser cephalic and elytral punctures, and second joint of antennæ even shorter.

CURCULIONIDÆ.

SUBFAMILY BRACHYDERIDES.

EUTINOPHÆA VARIEGATA, n. sp.

Dull reddish-brown, appendages paler. Densely clothed with white or whitish scales, sometimes with a slight greenish gloss; and conspicuously mottled with brown.

Head with punctures concealed. *Eyes* unusually large. *Rostrum* short, muzzle glabrous and polished. *Scrobes* produced slightly obliquely backwards, and then almost at right angles downwards. *Antennæ* rather short. *Prothorax* slightly wider than long, sides rounded in middle; punctures normally concealed. *Elytra* much wider than prothorax, parallel-sided to apical third; with regular rows of large, round punctures, appearing much smaller and suboblong through clothing. *Legs* stout, front tibiæ moderately curved. Length, $1\frac{3}{4}$ -2 mm.

Hab.—Queensland (H. Hacker), Cairns district (A. M. Lea). Type, I. 2725.

With the curved front tibiæ of *falcata*, but smaller than that species, eyes larger and closer together, scrobes somewhat different, prothorax wider and clothing very different. Of the five typical specimens no two have the scales exactly alike. On the head and rostrum they are mostly white or stramineous, with single dark scales scattered about and a large dark patch on each side of base of head. The prothorax may be conspicuously striped longitudinally, with the dark scales confined to the stripes, or obscurely striped with dark scales scattered singly. The scutellum is glabrous, but immediately behind it the scales are snowy. On the elytra the pale scales are mostly tinged with brown, but there are numerous small dark spots scattered about; on some specimens there is a large rounded one on each elytron at about the basal third.

On one specimen the dark elytral spots cover considerably more than half of the surface, and are all more or less conjoined. On the under-surface the scales are uniformly white, or with a slight tinge of green. On the legs they are sometimes very feebly mottled. Four are apparently males; the other is apparently a female, and differs in being somewhat larger, with the scales dingier and less conspicuously variegated.

A specimen, from Kuranda, in Mr. G. E. Bryant's collection, differs from the types in being much paler (the appendages are almost flavous). The scales on the head and rostrum entirely white; on the prothorax white, with two dark longitudinal stripes, each of which has a lateral projection at its middle; on the elytra most of the scales are dark, but with irregular white spots and fasciæ.

SUBFAMILY OTIORHYNCHIDES.

MYLLOCERUS.

As the described species of *Myllocerus* have now been more than trebled since my first table,⁽¹⁶⁾ a more extended one is now desirable. As in the former one, all species not actually known to myself have been omitted. Tables are often given to show how species, genera, etc., are allied, and yet distinguished, *inter se*. In the present table, as with others that I have given, the sole idea is to present the species in such a way that their identification may be more quickly accomplished than by wading through a mass of descriptions.

Many species have small femoral teeth, and others are entirely without same, but it is often so difficult to decide as to whether teeth are or are not present, especially if the specimens are at all dirty or gummy, that I have not used them for the major divisions. Nor have the comparative widths of the rostrum and the incurvature of its sides been so used; as the gradations in long series of species are so fine that they can only be usefully employed in separating really, or apparently, closely allied species. Many of the species are subject to considerable variation in colour,⁽¹⁷⁾ but I avoided using same to a greater extent than was perhaps necessary.

(16) *Ante*, 1905, p. 218.

(17) This is especially the case with green scales; these sometimes become golden or silvery, through the action of alcohol, etc.; grease will also sometimes cause them to appear of a dull-white, either entirely or in small patches of irregular shape and disposition. Snowy-white scales also naturally become somewhat darker with age, etc. It has appeared to me to be quite possible that "the large round spot of orange-brown" on the elytra of *rusticus* (unknown to me) may really not be natural to the species.

- A. Prothorax at base wider than elytra.
- a.* Apex of prothorax strongly incurved to middle *latibasis*
- aa.* Apex straight or almost so *laticollis*
- AA. Prothorax at base no wider than elytra, and usually much narrower.
- B. Prothorax at base much wider than at apex.
- b.* Prothorax not as wide at extreme base as before same. *canalicornis*
- c.* Prothorax considerably higher in middle than at base *apithosus*
- cc.* Prothorax not at all, or scarcely, higher in middle than at base. *armipectus*
- * Prosternum unarmed
- ** Prosternum armed posteriorly
- bb.* Prothorax widest at extreme base.
- d.* Elytra with rather long erect setæ or hairs.
- e.* Rostrum with a conspicuous process, directed backwards, or under surface
- ee.* Rostrum without such a process. *mirabilis*
- f.* Eyes longer than sides of rostrum in front of same *ceratorhinus*
- ff.* Eyes much shorter than rostrum. *hardcastlei*
- g.* Scales green *acutidens*
- gg.* Scales not green
- dd.* Elytral setæ depressed, or, if suberect, very short.
- h.* Apex of prothorax moderately or strongly incurved to middle.
- i.* Prothorax at most twice as wide as the median length. *taylori*
- j.* Scales green *confinis* (in part)
- jj.* Scales not green *tristis*
- ii.* Prothorax more than twice as wide as the median length. *bovilli*
- k.* Distance between eyes more than the median length of prothorax *prosternalis*
- kk.* Distance between eyes less.
- l.* Prothorax conspicuously glabrous in middle
- ll.* Prothorax with at least a few scales in middle.
- m.* Length of eyes much less than distance between same and base of antennæ
- mm.* Length of eyes equal (or almost so) to distance between same and base of antennæ.
- n.* Base of prothorax as wide as greatest width of elytra *fieldi*
- nn.* Base of prothorax somewhat narrower.
- o.* First joint of funicle fully once and one-half as long as second
- oo.* First joint not once and one-half as long *incurvus*
blackburni

- hh.* Apex of prothorax straight or almost so.
p. Scales partly green and prothorax with two black vittæ ... *speciosus*
pp. Scales not green; or, if green, prothorax not bivittate. ... *basicollis*
q. Base of prothorax with a keel-like flange on each side ... *torridus*
qq. Base not as in *q.* ... *bilineater*
r. Prothorax transversely impressed near base and apex ... *cinerascens*
rr. Prothorax not so impressed. ... *confinis* (in part)
s. Elytra with short upright or semiupright setæ. ... *castor*
t. Prothorax conspicuously bivittate. ... *longus*
tt. Prothorax not conspicuously bivittate. ... *intercavalis*
u. Median length of prothorax more than apical width ... *pollux*
uu. Median length less than apical width. ... *fugitivus*
v. Elytral markings sharply defined ... *subrostralis*
vv. Elytral markings not sharply defined ... *aurifer*
ss. Elytra with setæ resting on scales. ... *foveifrons*
w. Eyes very prominent. ... *doddi*
**.* Clothing bright-green. ... *setistriatus*
***.* Clothing not green. ... *echinatus*
- x.* Distance between eyes more than between same and base of antennæ ...
xx. Distance between eyes less than between same and base of antennæ ...
ww. Eyes much less prominent.
y. Rostrum distinctly longer than wide.
z. Size comparatively small ...
zz. Size comparatively large ...
yy. Rostrum about as long as wide.
a. Scales more or less green ...
aa. Scales not green ...
BB. Prothorax at base but little, or not at all, wider than at apex.
C. Elytra with long setæ or bristles.
b. Scales mostly green.
**.* First two joints of funicle more than half the length of scape ...
***.* These joints less than half the length of scape ...
bb. Scales not at all green.
c. Setæ on head and prothorax also long ...

- cc. Setæ on head and prothorax normal.
- * Front tibiæ with a strong median tooth *tibialis*
- ** Front tibiæ without such a tooth *suturalis*
- CC. Elytral setæ not long.
- D. Elytra with a conspicuous pale median fascia on a dark background *fasciatus*
- DD. Elytra not so fasciate.
- E. Prothorax with three black or infuscate vittæ.
- d. Scales not green.
- e. First joint of funicle much longer than second *multimaculatus*
- ee. First not much longer than second.
- f. Distance between eyes more than between same and base of antennæ
- ff. Distance between eyes less than between same and antennæ *exilis*
trilineatus
- dd. Scales partly green.
- g. First joint of funicle almost twice the length of second *hilli*
- gg. First joint not almost twice the length of second *sulcicornis*
- EE. Prothorax bivittate or non-vittate.
- F. Scales not green.
- h. Extreme base of prothorax slightly narrower than apex *amblyrhinus*
- hh. Extreme base at least as wide as apex.
- i. Prothorax transversely impressed near base and apex.
- j. Distance between eyes and apex of prothorax less than one-third the length of an eye *melvillensis*
rugicollis
- ij. Distance there more than half the length of an eye *sordidus*
- ii. Prothorax not transversely impressed.
- k. Eyes much less prominent than is usual in genus.
- l. Rostrum longer than wide *baodontomerus*
- ll. Rostrum wider than long.
- m. Apical plate of rostrum extremely short *griseus*
- mm. Apical plate almost equilaterally triangular *nasutus*
- kk. Eyes at least of normal prominence.
- n. Distance between eyes equal to length of prothorax *cyrtops*
- nn. Distance there less than length of prothorax.
- o. Scales entirely white.
- p. Elytral interstices multisetose *modestus*
- pp. Elytral interstices usually each with a single row of setæ.
- q. Length from apex of rostrum to apex of elytra more than 5 mm,

- qq.* Length, 5 mm. or less *foveiceps* (in part)
oo. Scales with more or less distinct dark spots. *minusculus*
r. Length from apex of rostrum to apex of elytra less than 4 mm.
rr. Length more than 4 mm.
s. Third joint of funicle distinctly (although not by much) longer than fourth *varius*
ss. Third joint scarcely, if at all, longer than fourth *fuscomaculatus*
FF. Scales partly or entirely green. *subapterus*
G. Base of prothorax almost as wide as base of elytra *constricticollis*
GG. Base narrower.
H. Prothorax at least as long as wide. *gratus*
t. Sides of prothorax strongly bisinuate *anophus*
tt. Sides not strongly bisinuate.
u. Distance between eyes not more than the length of an eye
uu. Distance there distinctly more than the length of an eye
HH. Prothorax more or less transverse.
I. Prothorax narrowest near base. *angustibasis*
* Narrowest part of prothorax inwards of fourth elytral stria *squamicornis*
** Narrowest part outwards of that stria *foveiceps* (in part)
II. Prothorax narrowest at or near apex. *elegans*
J. Distance between eyes at most equal to length of an eye *tatei*
JJ. Distance there more than the length of an eye. *nigrovarius*
K. Prothorax strongly rounded in middle *trepidus*
KK. Prothorax at most moderately rounded in middle.
L. First joint of funicle, scarcely, if at all, longer than second.
v. Elytral setæ not elevated above scales
vv. Elytral setæ elevated above scales.
w. Elytra maculate
ww. Elytra immaculate
LL. First joint of funicle distinctly longer than second.
x. Size comparatively small
xx. Size comparatively large
MM. Prothorax feebly transverse.
N. Femora edentate
NN. Femora dentate
darwini
carinatus
usitatus
mastersi

NOTES ON TABLE.

B. In this Group the prothorax is very decidedly wider at the base than at the apex, the increase being often quite regular. In BB the prothorax is occasionally slightly wider at the base than at the apex, but the sides are always incurved near the base, so that the apparent width is less conspicuous.

B. *d.* Nearly all species of the genus have more or less conspicuous setæ, but in these species the setæ are longer and erect, not depressed; *confinis* has erect setæ, but they are shorter than those of *d.*

B. *mm.* To decide this character the head must be viewed from the side.

B. *nn.* In these species the base of the prothorax is almost equal to the base of the elytra, but as their shoulders are rounded, the sides behind them are somewhat wider.

B. *r.* This character, although not mentioned in the original description, is quite distinct on a co-type in the Museum; the depressions are distinct towards the sides, but are not continued across the disc.

B. *s.* In these species the setæ, although decidedly shorter than in *d.*, are of such a nature that their tips do not rest upon the scales, whereas in *ss* they rest upon the scales throughout their length. In *aphthosus*, however, a few of the setæ are not entirely depressed.

y. For the purposes of this table, the rostrum is held to commence at an imaginary line touching the front of the eyes.

F. *i.* The bisinuate lateral outline is not here referred to, nor the feeble transverse impressions that sometimes accompany same.

F. *j.* Specimens of many species of the genus have the head protruded beyond the prothorax more than it should be, the extra space being glabrous; but in these species the squamose portion only is considered. In *melvillensis* the eyes almost touch the prothorax; whilst in *rugicollis* they are somewhat distant from it.

F. *o.* On the muzzle of *cyrtops* there are a few green scales.

MYLLOCERUS MODESTUS, Pasc.

niveus, Lea.

In preparing the table given in the present paper I had occasion to carefully compare the type of *niveus*, with two co-types of *modestus*, and found that they belong to but one species.

MYLLOCERUS FOVEICEPS, Lea.

At the time that this species was described I had seen but two specimens, and these were probably bleached. There

are now eight in the Museum that appear to belong to the species, and these indicate that the colour is normally of a rather pale-green, and with the elytral setæ fairly conspicuous. Bleached specimens look much like small ones of *modestus*, but differ in having the rostrum somewhat thinner, prothorax slightly longer, and elytra less cylindrical. The fresh specimens are all from Melville Island (G. F. Hill and W. D. Dodd), and four of them at least were taken on acacia flowers.

MYLLOCERUS AURIFEX, Pasc.

abundans, Lea.

Mr. Arrow has kindly sent a specimen from the Pascoe collection as *M. aurifex*; it is the species I subsequently named *abundans*, but from its description I imagined it to be a very different looking insect, not even close to *abundans*.

Mr. J. F. Field has taken the species in abundance at Tennant Creek; the specimens from him as a rule are slightly smaller and with paler legs than the type of *abundans*, but I can find no structural differences.

MYLLOCERUS SPECIOSUS, Blackb.

An unusually large ($7\frac{1}{2}$ mm.) specimen of this species, from the Coen River, has the black prothoracic vittæ reduced to a fairly large spot on each side of the base.

MYLLOCERUS EXILIS, Lea.

On re-examination of the antennæ of this species I find that the first joint of the funicle was wrongly described and tabulated as being shorter than the second; although it appears to be so from certain directions. From positions where the full lengths of the joints are visible the second is seen to be slightly shorter than the first. Mr. W. D. Dodd has recently taken the species in abundance on the Fortescue River.

MYLLOCERUS MASTERSI, Lea, var. (?)

Seven specimens from Darwin (G. F. Hill's 152, F. P. Dodd, and H. H. D. Griffith) represent either a variety of this species, or an extremely closely allied one. They have the legs and antennæ decidedly paler (almost flavous, excepting the club) and the antennæ shorter (although the joints appear to have the same proportions, *inter se*), with the scape less strongly arched.

MYLLOCERUS POLLUX, Lea.

A specimen from the Stewart River (Northern Queensland) appears to belong to this species, but differs from the type in

having the clothing of the upper-surface of an almost uniform greyish-white; the elytra with very few and ill-defined spots, and the prothorax quite immaculate.

MYLLOCERUS TAYLORI, Lea.

A specimen from the Coen River apparently belongs to this species, but differs from the type in being slightly larger, and with the clothing whitish, with but a vague trace of green.

MYLLOCERUS LATIBASIS, n. sp.

Reddish-brown, appendages slightly paler. Densely clothed with white or whitish scales, on the elytra speckled with feeble brownish spots.

Head wide, strongly flattened between eyes, these not very prominent. Rostrum scarcely as long as the basal width, sides decreasing in width to near apex, but apex slightly inflated, with a conspicuous median carina and a sublateral one traceable towards each side. Antennæ moderately long; first joint of funicle just perceptibly longer than second. *Prothorax* more than thrice as wide as median length, apex strongly incurved to middle, sides distinctly increasing in width to base, which is strongly bisinuate, the extreme base wider than elytra; punctures traceable through clothing. *Elytra* parallel-sided to near apex⁽¹⁸⁾; with regular rows of large punctures, appearing small through clothing. *Femora* stout, very feebly dentate. Length (excluding rostrum), 6½-7 mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2538.

With very wide prothorax, distinctly incurved to middle of apex, as in *bovilli*; but differs from that species in the base being slightly wider than the elytra, and the head and rostrum considerably wider, the former with a curiously flattened appearance between the eyes. From *laticollis* it differs in the shape of the base being different, the head less convex, eyes and sides of under-surface of rostrum different. One specimen has a distinct transverse impression on each side towards base of prothorax, but on two others these are not traceable.

MYLLOCERUS FIELDI, n. sp.

Reddish-brown, sometimes almost black; appendages reddish. Densely clothed with whitish scales, feebly speckled with brown spots on the elytra.

(18) Unless stated to the contrary the elytra are similarly parallel-sided in all the following species.

Head wide, flat between eyes, these larger and less prominent than usual. Rostrum shorter than wide, sides feebly incurved to middle, gently concave along middle, and with a very feeble carina. Antennæ moderately long; first joint of funicle distinctly, but not much, longer than second. *Prothorax* about thrice as wide as median length, apex strongly incurved to middle, sides strongly increasing in width to base, which is strongly bisinuate and the exact width of elytra; punctures traceable through clothing. *Elytra* with regular rows of fairly large punctures, almost concealed by clothing but appearing as fine striæ. *Femora* very feebly dentate, front pair especially. Length, $4\frac{1}{2}$ -5 mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2539.

Allied to the preceding species, from which it differs in being much smaller, prothorax at base the exact width of elytra, head narrower, and eyes more ovate and less prominent. Both species are without elytral setæ. From *bovilli* it differs in the eyes being much less prominent, clothing different, prothorax without a glabrous median space, etc. There are three specimens in the Museum, two whose clothing is as described, but the third has the scales on the upper-surface of a pale coppery-green, and on the elytra without spots.

MYLLOCERUS BLACKBURNI, n. sp.

Black, appendages more or less reddish. Densely clothed with green or bluish-green scales, paler on the legs than elsewhere. Setæ of upper-surface rather indistinct, not at all, or scarcely, elevated above the scales.

Head somewhat flat between eyes; these fairly large and prominent; inter-ocular fovea narrow and distinct. Rostrum about as long as the basal width, sides feebly diminishing in width to apex, incurvature of scrobes near apex very conspicuous; with a narrow median carina. Antennæ moderately long; first joint of funicle slightly longer than second. *Prothorax* at base almost thrice as wide as the median length, apex rather strongly incurved to middle, sides strongly increasing in width to base, which is strongly bisinuate and slightly narrower than elytra; punctures traceable through clothing. *Elytra* with regular rows of partially concealed punctures. *Femora* edentate. Length, 5-6 mm.

Hab.—Northern Queensland (Blackburn's collection). Type, I. 2540.

The prothorax is more transverse than in *taylori*, the medio-apical incurvature is rather more pronounced, and the eyes less prominent. From *bovilli*, and the preceding species,

it differs in being more cylindrical, prothorax less transverse, medio-apical incurvature less pronounced, and rostrum of somewhat different shape. Very close to *incurvus*, but with second joint of funicle less noticeably shorter than first, prothorax slightly more transverse, eyes rather more prominent and form rather less cylindrical. These differences, although only comparative, are quite distinct when specimens of each are placed side by side; but as the two species are separated the width of the continent no confusion will probably arise from correctly labelled specimens. On the prothorax of the four typical specimens the scales are sparser in the middle than elsewhere, but this appears to be due to partial abrasion; it is certainly of a different nature to the glabrous space on *bovilli*.

MYLLOCERUS TRISTIS, n. sp.

Black or blackish, appendages not much paler. Densely clothed with whitish-grey scales, on the elytra variegated with small feeble brownish spots.

Head gently convex between eyes; these moderately prominent. Rostrum shorter than wide, median carina feeble, the sublateral ones still more so, apical plate concave. Antennæ moderately long; first joint of funicle distinctly longer than second. *Prothorax* almost thrice as wide as the median length, apex rather strongly incurved to middle, sides increasing in width to base, which is strongly bisinuate and scarcely narrower than elytra, outlines continuous with those of head and elytra; punctures traceable through clothing. *Elytra* with regular rows of rather large punctures, appearing like fine striæ through clothing. *Legs* rather stout; femora edentate. Length, 6-6½ mm.

Hab.—Queensland: Charters Towers (Blackburn's collection). Type, I. 2541.

Somewhat like small specimens of *latibasis*, but base of prothorax not wider than elytra. The head is considerably wider and rostrum of different shape to those of the two preceding species. The elytra appear to be without setæ, except for a few about the apex. In certain lights many of the scales appear to have a faint golden gloss, but in most lights they appear to be opaque. Two specimens from Charters Towers are alike in colour, but one labelled as from Northern Queensland has no elytral spots.

MYLLOCERUS PROSTERNALIS, n. sp.

Black, appendages dull reddish-brown. Densely clothed with greyish-green or coppery-green scales. Elytra with indistinct setæ not elevated above scales.

Head gently convex between eyes, these fairly large and rather prominent. Rostrum slightly longer than wide, sides moderately incurved to middle; median carina distinct, the sublateral ones rather feeble. Antennæ moderately stout; scape almost straight; first joint of funicle slightly longer than second. *Prothorax* slightly more than twice as wide as the median length, apex moderately incurved to middle, sides rounded and increasing in width to base, which is strongly bisinuate and slightly narrower than elytra, punctures rather coarse. *Elytra* with regular rows of fairly large, partially concealed punctures. *Prosternum* with a conspicuous, narrow, medio-basal ridge. *Femora* stout, very feebly dentate. Length, 7-7½ mm.

Hab.—Northern Queensland (Blackburn's collection). Type, I. 2542.

Close to *taylori*, but prothorax more transverse, and a carina replacing the median impunctate line on the rostrum of that species. The prosternal carina is very distinct; on many other species of the genus a faint longitudinal swelling may sometimes be traced, and this just between the front coxæ appears almost tuberculiform; but on the present and following species the carina is narrow and acutely elevated.

MYLLOCERUS INTERCOXALIS, n. sp.

Reddish-brown. Densely clothed with greyish-white scales, obscurely mottled with brown on elytra.

Head gently convex at base, flattened and with a small fovea between eyes; these very prominent. Rostrum scarcely as long as the width at base, sides feebly incurved to near apex, with a shining median line (scarcely a carina), sublateral carinæ fairly distinct. Antennæ moderately long; scape gently curved; first joint of funicle distinctly longer than second. *Prothorax* somewhat less than twice as wide as the median length, apex almost straight, sides gently rounded and increasing in width to base; punctures traceable. *Elytra* slightly wider than prothorax, with regular rows of moderate punctures, appearing small through clothing. *Prosternum* with a conspicuous, narrow, medio-basal ridge, its apex projecting between front coxæ. *Femora* very feebly dentate. Length, 7½ mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2543.

With a conspicuous prosternal ridge as on the preceding species, but otherwise not very close to same. The head is much as in *latibasis*, but the prothorax is much less transverse, and the medio-apical incurvature is very feeble. In build close to *aphthosus*, but head wider, clothing not at all

green, etc. From *pollux*, to which it is very close it differs in having the head wider and prothorax wider at apex. The elytral setæ are fairly dense towards and on the suture, and posteriorly, where they are in more than a single row on each interstice; but they are not distinctly elevated above the surrounding scales. The pale colour of the derm is probably not constant.

MYLLOCERUS FUGITIVUS, n. sp.

Reddish-brown, appendages somewhat paler. Densely clothed with greyish-white, or greyish-green, or coppery-green, or green scales. Elytral setæ fairly distinct but resting on scales.

Head gently convex. Eyes fairly prominent. Rostrum distinctly longer than wide, wider near apex than elsewhere, median and sublateral carinæ normally concealed. Antennæ rather long; first joint of funicle decidedly longer than second. *Prothorax* slightly longer than the apical width, apex straight, sides scarcely rounded but distinctly increasing in width to base; punctures normally concealed. *Elytra* slightly wider than prothorax; with regular rows of moderate punctures, normally scarcely appearing to interrupt fine striæ. *Femora* finely dentate. Length, 5-5½ mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2544.

Probably on living specimens the scales are all more or less green, but on several of the specimens in the Museum there is not the least trace of green.

MYLLOCERUS SUBROSTRALIS, n. sp.

Reddish-brown, appendages paler. Densely clothed with pale-green scales. Upper-surface with numerous distinct, subdepressed pale setæ.

Head gently convex, with a small inter-ocular fovea. Eyes rather large, not prominent. Rostrum longer than wide, somewhat inflated about apex, median and sublateral carinæ traceable through clothing. Antennæ rather long; first joint of funicle distinctly longer than second. *Prothorax* and *elytra* as described in preceding species, except that the sides of the prothorax are gently rounded, and that the elytra are somewhat wider. *Femora* finely but acutely dentate. Length, 6½-7 mm.

Hab.—North-western Australia (Blackburn's collection). Type, I. 2545.

In general appearance close to *aurifex*, but differs in the rostrum, dense elytral setæ, and scape not grooved on under-surface. In build it is close to *cinerascens*, but the clothing

is more or less green. Also close to the preceding species, but larger and with eyes almost embedded in head. On the under-surface of the rostrum there is a subconical tubercle, but this may be confined to the male.

A second specimen, from Roebourne (C. French), has the derm darker and the scales of a rather bright-green, with fairly numerous distinct dark spots on the elytra (on the type the elytra are almost immaculate) and the clothing of the legs almost white.

MYLLOCERUS CONFINIS, n. sp.

Black, appendages in places diluted with red. Densely clothed with whitish scales, variegated with numerous small blackish spots on elytra. With numerous short, but distinct, erect or suberect setæ on elytra.

Head gently convex at base, flat and with a narrow fovea between eyes; these large and prominent. *Rostrum* about as long as the width at base, sides diminishing in width to near apex; median and sublateral carinæ distinct. *Antennæ* moderately stout; scape gently curved; first joint of funicle distinctly longer than second. *Prothorax* at base not twice as wide as the median length, and at apex very little more than the length, apex straight or gently incurved to middle, sides gently rounded and distinctly increasing in width to base; punctures normally traceable. *Elytra* distinctly, but not much, wider than prothorax; apparently with striæ only, but really with fairly large punctures in the striæ. *Femora* scarcely visibly dentate. Length, 5-7 mm.

Hab.—South Australia: Hergott Springs and Oodnadatta (Blackburn's collection). Type, I. 2546.

The six specimens in the Museum evidently belong to but one species, but one has the prothorax almost perfectly straight at apex, one has it moderately incurved to middle (the degree, however, much less than in *bovilli*), and the others are intermediate between these extremes. The prothorax is considerably shorter than in *cinerascens* and *canalicornis*, and the hind angles are much more acute. *Bilineater* has the prothorax conspicuously bivittate. In general appearance it is very close to *castor* and *pollux*, and with the base of the prothorax as in the latter species, from which it may be distinguished by the elytral markings being more sharply defined, and the prothoracic markings consisting of a small spot⁽¹⁹⁾ on each side towards the base, instead of rather vague vittæ. It is the first of the group with wide base of prothorax to be recorded from South Australia.

(19) Not always present.

MYLLOCERUS ACUTIDENS, n. sp.

Black, appendages in places obscurely diluted with red. Densely clothed with whitish-grey or slaty-grey scales, feebly mottled on elytra. Elytra with fairly dense and moderately long, thin, erect setæ.

Head gently depressed between eyes, these not very prominent. Rostrum slightly longer than wide, sides incurved to middle; median and sublateral carinæ distinct. Antennæ rather long; scape moderately curved; first joint of funicle almost twice the length of second, second twice the length of third. *Prothorax* at widest not twice the median length, apex straight, sides rather strongly rounded and widest near base; punctures normally traceable. *Elytra* distinctly wider than prothorax, shoulders somewhat thickened; striate-punctate, punctures appearing very small through clothing. *Femora* acutely, but not very strongly dentate. Length, $6\frac{1}{2}$ - $7\frac{1}{2}$ mm.

Hab.—Australia: Sherlock River. Type in British Museum.

In colour and general appearance fairly close to *cinerascens*, but elytra with numerous long erect hairs, very different to the short stout setæ of that species. A specimen (from North-western Australia), apparently belonging to this species, was in the collection of the late Rev. T. Blackburn.

MYLLOCERUS CERATORHINUS, n. sp.

Black or blackish; appendages more or less reddish. Densely clothed with whitish scales, on the upper-surface conspicuously variegated with black. Elytra with a closely-set row, on each interstice, of moderately long, thin, erect setæ.

Head gently convex. Eyes very large but not very prominent; longer than sides of rostrum in front of same. Rostrum unusually short and pointed. Antennæ moderately long; scape distinctly curved; two basal-joints of funicle sub-equal. *Prothorax* almost as long as the basal width, apex straight, sides gently rounded and increasing in width to base; punctures normally traceable. *Elytra* with shoulders strongly rounded and decidedly wider than prothorax; with regular rows of almost concealed punctures. *Femora* very feebly dentate. Length, $5\frac{1}{4}$ - $5\frac{1}{2}$ mm.

Hab.—Western Australia: Cue (H. W. Brown). Type, I. 2547.

A very distinct species. On the prothorax there is a black longitudinal vitta and a rounded spot towards each side at the basal third. On the elytra at least half of the surface

is covered by the black scales; these being condensed into numerous irregular, transverse, black fasciæ, all (or most) of which are more or less irregularly conjoined. On the prothorax the setæ are rather more distinct than usual, but they are inclined forwards, and so much less conspicuous than those on the elytra. On each side of the muzzle there is usually a thin fascicle of flavous setæ, appearing at first glance like a stiff bristle. The rostrum is unusually short, being shorter than the length of an eye, and it is distinctly narrowed from base to apex. The apical plate is also of unusual shape, being very narrow and vertical in front, and posteriorly elevated into a small horn, that is very conspicuous from the sides. The scrobes are short and round, almost meet internally, and almost touch the eyes posteriorly.

MYLLOCERUS LONGUS, n. sp.

Black, appendages more or less reddish. Densely clothed with bright-green scales. Elytral setæ mostly confined to a single row on each interstice, and not elevated above the scales.

Head gently convex; eyes very prominent. Rostrum longer than wide, median carina distinct in front. Antennæ long and thin; first joint of funicle once and one-half as long as second, second almost twice the length of third. Prothorax almost as long as wide, apex straight, sides gently sinuous, base distinctly wider than apex; with rather dense and coarse punctures. *Elytra* distinctly wider than prothorax; with regular rows of moderate punctures, appearing small through clothing. *Legs* rather long and thin; front tibiæ not denticulate. Length, 7 mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2548.

A bright-green species, with unusually long rostrum and legs, and conspicuous prothoracic punctures. The head behind the eyes is very little wider than the rostrum in front of them. The sides of the rostrum are not incurved between the base and subapical inflation, as in most species of the genus, but are slightly dilated, so that they are feebly bisinuate. The apical plate is also shorter than usual. The four front femora appear to be truly edentate, but the hind ones from certain directions appear to each have a scarcely visible tooth.

MYLLOCERUS DODDI, n. sp.

Black, legs in places obscurely diluted with red. Densely clothed with green scales; elytra with fairly numerous black spots. Elytra with moderately long erect setæ, much shorter on prothorax, but still in places suberect.

Head gently convex at base, depressed and with a small fovea between eyes; these moderately prominent. *Rostrum* slightly longer than wide, almost parallel-sided; median carina rather indistinct, the sublateral ones fairly distinct; apical plate very short. *Antennæ* long and thin; scape rather strongly curved; first joint of funicle slightly longer than second and third combined, second as long as third and fourth combined. *Prothorax* lightly transverse, sides strongly rounded, apex straight, about as wide as base; with rather coarse punctures. *Elytra* much wider than base of prothorax; with rows of rather large punctures, appearing small through clothing. *Femora* rather strongly dentate. Length, 6-6½ mm.

Hab.—North-western Australia: Fortescue River (W. D. Dodd). Type, I. 2549.

The outlines are much as in *elegans*, but readily distinguished from that species by the strong femoral dentation and long elytral clothing. The setæ, which from certain directions appear to be in quite a regular row on each interstice, are quite as long as in *echinatus*, but much finer, slightly finer than in *suturalis*; but from those species it is readily distinguished by its much larger size, conspicuously green clothing, femoral dentition, etc. Three feeble dark spots may be traced on the prothorax of one specimen. The two basal-joints of funicle are slightly longer than the five following ones combined.

MYLLOCERUS SETISTRIATUS, n. sp.

Black, appendages in places feebly diluted with red. Densely clothed with green scales. *Elytra* with numerous stiff erect setæ of moderate length, and each appearing to be supported on a small black granule; prothorax with shorter and less erect setæ.

Head moderately convex; eyes fairly large but not very prominent. *Rostrum* slightly wider than long, sides feebly diminishing in width, gently depressed and with a median line along middle, sublateral carinæ moderately distinct but feebly curved at insertion of antennæ. *Antennæ* (for the genus) comparatively short; first joint of funicle almost as long as second and third combined, second shorter than third and fourth combined, the two basal ones distinctly shorter than the five apical ones combined. *Prothorax* moderately transverse, sides gently rounded in middle, apex straight and the width of base; punctures rather coarse. *Elytra* distinctly wider than prothorax; striate-punctate, punctures partially concealed. *Femora* strongly and acutely dentate; tibiæ with a granuliform swelling about middle. Length, 5½ mm.

Hab.—Queensland: Coen River (W. D. Dodd). Type, I. 2550.

In general appearance fairly close to the preceding species, but shorter, and rostrum distinctly shorter. The combined length of the two basal-joints of funicle scarcely more than one-third the length⁽²⁰⁾ of scape, instead of more than half, eyes larger and sides of prothorax less rounded. Each of the elytral setæ is supported by a small granule, these being very distinct from certain directions.

MYLLOCERUS TIBIALIS, n. sp.

Black, appendages in places obscurely diluted with red. Densely clothed with ashen-grey scales. Elytra with numerous stiff, erect setæ of moderate length.

Head moderately convex. Eyes rather large and not very prominent. Rostrum distinctly transverse, sides feebly decreasing in width to apex, median carina distinct, the sub-lateral ones almost concealed, apical plate rather large. Antennæ comparatively stout; first joint of funicle slightly longer than second, second distinctly longer than third. *Prothorax* moderately transverse, sides somewhat rounded in middle, base and apex of almost even width, the latter almost straight; with two somewhat irregular transverse impressions, one near apex, the other near base; with rather coarse punctures. *Elytra* much wider than prothorax; with rows of rather strong, almost concealed punctures. *Prosternum* with a subconical tooth behind coxæ. *Femora* rather strongly and acutely dentate; tibiæ, more noticeably the front pair, with a dentiform swelling about middle. Length, 7 mm.

Hab.—Queensland: Coen River (W. D. Dodd). Type, I. 2551.

In general appearance the type is somewhat like a large specimen of *rugicollis*, but the prothoracic impressions are more conspicuous, the elytral setæ are erect and much longer, and the front tibiæ are conspicuously armed; the latter character (which, however, may be confined to the male) renders the species one of the most distinct in the genus. On the under-surface of the head there is a subquadrate, highly-polished space on each side of the gular suture, with oblique ridges (probably used for stridulation) towards the sides.

MYLLOCERUS GRISEUS, n. sp.

Black or blackish, appendages reddish. Rather densely clothed with greyish-white scales, feebly variegated with brownish spots on elytra. Upper-surface with fairly dense, short, subdepressed setæ.

(20) To see the proportions clearly the antennæ must be viewed from the sides.

Head moderately convex; eyes scarcely interrupting general convexity of outline. Rostrum stout, scarcely as long as the basal width; sides feebly decreasing in width to near apex; median carina narrow and distinct, the sublateral ones less so. Antennæ rather thin; first joint of funicle slightly longer than second, second as long as third and fourth combined. *Prothorax* almost twice as wide as long, sides feebly rounded, apex feebly incurved to middle and about the width of base; punctures normally traceable. *Elytra* distinctly wider than prothorax, sides very feebly dilated to beyond the middle; with rows of rather large punctures, appearing small through clothing. *Femora* scarcely visibly dentate. Length, 5-6 mm.

Hab.—North-western Australia (Blackburn's collection). Type, I. 2552.

The eyes, although fairly large, are much less prominent than is usual. In general appearance the species is close to *amblyrhinus*, but the prothorax is slightly wider at the base than at the apex. *Nasutus* has the prothorax less transverse, quite straight at apex, and much more prominent eyes. *Bæodontomerus* has head and rostrum narrower, and prothorax much less conspicuously transverse. *Sordidus* has the prothorax less transverse, and with more strongly rounded sides.

MYLLOCERUS MELVILLENSIS, n. sp.

Of a rather pale red, club darker. Densely clothed with greyish-white scales, mottled with pale-brown.

Head rather convex. Eyes rather small, widely separated, very prominent, and decidedly closer to prothorax than usual. Rostrum stout, slightly shorter than the basal width, sides gently incurved; carinæ rather feeble. Antennæ thin; first joint of funicle slightly longer than second. *Prothorax* not quite twice as wide as long, sides feebly bisinuate, apex straight and as wide as base, a vague transverse impression near apex and another near base; punctures scarcely traceable. *Elytra* much wider than prothorax, feebly dilated to beyond the middle; punctures appearing small through clothing. *Femora* edentate. Length, 4 mm.

Hab.—Northern Territory: Melville Island (W. D. Dodd). Type, I. 2553.

Allied to *rugicollis*, but prothorax wider, more conspicuously bisinuate at base, head more convex between eyes, and these more rounded and prominent. In the present species the base of each elytron is rather distinctly produced half-way between the suture and side; in *rugicollis* this is not the case. The head and elytra are feebly mottled with irregular brown spots; on the prothorax there is a fairly wide

vitta on each side. The elytral setæ are so placed amongst the scales that they are scarcely traceable, except at the sides and posteriorly.

MYLLOCERUS MINUSCULUS, n. sp.

Black or blackish, appendages reddish. Densely clothed with whitish scales, on the elytra feebly variegated with brownish spots.

Head feebly convex at base, gently depressed between eyes. Eyes rather large, prominent, and widely separated, but the space between them less than length of prothorax. Rostrum slightly longer than wide, sides gently incurved to middle, gently depressed along middle to between eyes; median carina not traceable through clothing, the others very feeble. Antennæ moderately long and thin; two basal-joints of funicle subequal. *Prothorax* almost as long as wide, sides feebly rounded in middle, apex almost straight and almost as wide as base; punctures partially traceable. *Elytra* much wider than prothorax, with rows of moderate punctures, appearing scarcely more than striæ through clothing. *Femora* scarcely visibly dentate. Length, $3\frac{1}{4}$ - $3\frac{1}{2}$ mm.

Hab.—Queensland: Gayndah (A. M. Lea). Type, I. 2554.

A small grey species, much like several species of *Titinia*; but as the prothorax is decidedly bisinuate at the base it appears desirable to refer it to *Myllocerus*. Of the two specimens in the Museum one has a feeble dark vitta on each side of the prothorax, but the other is without same.

MYLLOCERUS VARIUS, n. sp.

Black, appendages more or less red. Densely clothed with white or whitish scales, more or less conspicuously mottled with black or dark-brown. Elytra with numerous blackish, suberect setæ.

Head flat between eyes; these not very prominent, the space between them distinctly shorter than length of prothorax. Rostrum slightly longer than wide, sides decreasing in width to apical third, and then gently inflated; median and sublateral carinæ distinct, the latter less widely separated on their posterior half than usual. Antennæ long and thin; scape distinctly curved; first joint of funicle distinctly longer than second. *Prothorax* not much wider than long, sides gently rounded, apex feebly incurved to middle, or almost straight, almost the width of base, punctures traceable. *Elytra* much wider than prothorax, feebly dilated to beyond the middle; punctures normally almost or quite concealed, but striation distinct. *Femora* edentate. Length, 4-5 mm.

Hab.—Western Australia: Cue (H. W. Brown). Type, I. 2555.

At a glance appears to belong to *Titinia*, but the prothorax is distinctly bisinuate at the base. In some respects it seems close to *multimaculatus*, but the rostrum is differently shaped, and the antennæ are much thinner. In my former table would have been associated with *trilineatus*, but the prothorax is without a dark median line. In many respects it is close to *fuscumaculatus*, but the antennæ are somewhat longer, the eyes are not quite so prominent, and the sides of the rostrum are slightly different. The clothing as described may be of the males only. The numerous specimens taken by Mr. Brown appear to belong to but one species, as structurally (except for slight differences that are almost certainly sexual) they appear to be all alike. But by the clothing, markings, and apex of prothorax they may be divided into four sections, although there are a few specimens that are intermediate between two sections:—

1. Prothorax usually feebly incurved at middle of apex, with an irregular dark vitta on each side. Elytra with numerous small dark spots, and usually with a large irregular one on each side beyond the middle (this spot may be entire, or simply a closely-set cluster of small spots). Elytra with numerous, more or less erect, blackish setæ.

2. Scales of upper-surface of an almost uniform pale slaty-grey. Elytra with erect dark setæ on basal half, but absent posteriorly. Apex of prothorax straight, or feebly projecting in middle.

3. Upper-surface with sharply contrasted markings, and apex of prothorax as in Section 1; but elytra entirely without suberect setæ.

4. Scales and apex of prothorax as in Section 2, but elytra entirely without suberect setæ.

In all sections the scales on the under-surface frequently have a golden lustre in parts. In Sections 2 and 4, which probably consist of females, the others probably consisting of males, there are usually three whitish spots at the base of the elytra, and occasionally there are some feeble pale spots scattered amongst the slaty-grey ones. In all sections there are a few pale depressed setæ on the elytra, but they are more distinct on 2 and 4 than on 1 and 3. Of fourteen specimens of 1 and 3, there are not two with the spots exactly alike in size and distribution.

MYLLOCERUS CONSTRICTICOLLIS, n. sp.

Reddish-brown, appendages (club excepted) paler. Densely clothed with golden-green scales, on the elytra

conspicuously variegated with black spots. Elytral setæ distinct only from the sides.

Head feebly convex at base, flat, and with a small fovea between eyes; these rather large and prominent. Rostrum slightly longer than wide, sides gently incurved to middle; carinæ traceable, but not sharply defined. Antennæ long and thin; scape distinctly curved; first joint of funicle slightly longer than second and third combined, and second than third and fourth combined. *Prothorax* slightly longer than wide, sides strongly rounded in middle, and rather deeply constricted between same and base and apex, apex straight, as wide as base; punctures traceable. *Elytra* much wider than prothorax, sides feebly dilated to beyond the middle; striation distinct but punctures almost or quite concealed. *Legs* rather long; femora lightly but distinctly dentate. Length, $4\frac{1}{2}$ mm.

Hab.—Northern Territory: Tennant Creek (J. F. Field). Type, I. 2556.

A small green species, but readily distinguished from the other small green ones by its long prothorax, which is strongly bisinuate both at the sides and base. The appendages are also rather longer than is usual. The dark spots on the elytra of the type are more or less transversely placed and conjoined towards the base, but they are entirely absent from the sides and posterior declivity.

MYLLOCERUS ANGUSTIBASIS, n. sp.

Black, appendages (parts of femora excepted) more or less reddish. Densely clothed with greenish scales, on the elytra mottled with brown. Elytra with a few setæ at the sides and posteriorly, but scarcely traceable elsewhere.

Head flat between eyes; these rather large and prominent. Rostrum about as long as wide, flat along middle; median and sublateral carinæ narrow and distinct. Antennæ thin; first joint of funicle distinctly longer than second. *Prothorax* moderately transverse, flat in middle, sides rather strongly rounded, apex feebly incurved to middle and slightly wider than base, narrowest part slightly inwards of fourth elytral stria; punctures almost concealed. *Elytra* much wider than prothorax, sides feebly dilated to beyond the middle; punctures appearing small through clothing. *Prosternum* with a narrow, acute, medio-basal ridge. *Femora* edentate. Length, $4\frac{1}{4}$ mm.

Hab.—North-western Australia: Fortescue River (W. D. Dodd). Type, I. 2557.

In general appearance close to *Proxyrodes maculatus*, but femora edentate. The sides of the prothorax are almost as

strongly rounded as in *elegans*, but the disc is flattened, the femora are unarmed, and the size is much smaller. The flattened disc of the prothorax will also distinguish it from *usitatus* and *darwini*.

MYLLOCERUS SQUAMICORNIS, n. sp.

Black, parts of appendages more or less reddish. Densely clothed with golden-green scales. Elytra with fairly distinct, subdepressed stramineous setæ, more distinct on suture than elsewhere.

Head rather convex, but somewhat flattened in front. Eyes not very prominent. Rostrum distinctly shorter than the basal width, sides distinctly decreasing in width to apex; carinæ not traceable. Antennæ long and thin; scape moderately curved; first joint of funicle twice the length of second, second scarcely longer than third. *Prothorax* lightly transverse, sides feebly rounded, apex straight and just perceptibly wider than base, narrowest part slightly outwards of fourth elytral stria, base feebly bisinuate; punctures scarcely traceable. *Elytra* much wider than prothorax; striation distinct but punctures almost or quite concealed. *Femora* edentate. Length, $4\frac{1}{2}$ mm.

Hab.—South Australia: Cleve (J. Blackburn). Type, I. 2558.

The prothorax is almost exactly the same width at base as at apex, but as on close examination it certainly appears to be slightly narrower at the base, it has been tabulated with *angustibasis*, from which it differs in many respects in the head and prothorax. But regarding it as belonging to II in the table, it would be associated with *usitatus*, whose head, eyes, rostrum, and antennæ are all different. *Tatei*, the only other green species known from South Australia, has conspicuously dentate femora, and is otherwise very different. The scales on the antennæ are of the same shade of green as on the rest of the body; in most species of the genus the antennal clothing is usually much paler. The head is unusually wide and flattened in front, with the flattened space continued almost to apex of rostrum; on the latter the median carina is not at all traceable, and the sublateral ones are traceable only as vague elevations where the antennæ are inserted. The short second joint of funicle is also distinctive.

MYLLOCERUS NIGROVARIUS, n. sp.

Black, appendages reddish. Densely clothed with bright-green scales, variegated with black on prothorax and elytra.

Elytra with a regular (or almost regular) row of short, but distinct, suberect stramineous setæ on each interstice.

Head gently convex at base, flattened between eyes; these large and prominent, the space between them scarcely more than the length of each. Rostrum scarcely as long as the basal width, sides decreasing in width to near apex; median carina distinct in front, the sublateral ones rather feeble. Antennæ moderately long and thin; two basal-joints of funicle subequal. *Prothorax* not quite twice as wide as long, sides feebly rounded, apex straight and almost as wide as base; punctures traceable. *Elytra* much wider than prothorax, feebly dilated to beyond the middle; striation distinct but punctures greatly obscured by clothing. *Femora* very feebly (scarcely visibly) dentate. Length, $3\frac{1}{4}$ -4 mm.

Hab.—Queensland: Coen River (W. D. Dodd). Type, I. 2559.

The elytral setæ are rather conspicuous but much shorter than in *echinatus*, and the other species tabulated as having long setæ. Close to *trepidus* and *darwinii*, but elytral setæ somewhat longer and upper-surface conspicuously spotted. Mr. Dodd sent an abundance of specimens, the majority of which have the derm entirely black, but in others it is more or less reddish; the legs are sometimes almost black, but are nearly always conspicuously reddish. On the prothorax there is nearly always a conspicuous dark vitta on each side, but it is occasionally broken up into spots, and is sometimes scarcely traceable. On the elytra there are numerous small dark spots of irregular size and distribution.

MYLLOCERUS CYRTOPS, n. sp.

Black, appendages in places obscurely reddish. Densely clothed with whitish scales and with numerous depressed setæ.

Head gently convex. Eyes large and prominent, the distance between them less than length of prothorax. Rostrum about as long as wide, sides almost parallel; median carina distinct in front, the sublateral ones rather feeble. Antennæ long and thin; scape rather strongly curved; two basal-joints of funicle decidedly elongate, of almost equal length. *Prothorax* scarcely once and one-half as wide as long, sides moderately rounded, apex straight and almost the width of base, with a feeble transverse impression near apex and another near base; punctures rather dense, but almost concealed. *Elytra* much wider than prothorax; with regular rows of large, but almost concealed punctures, striation

distinct. *Legs* rather long; femora scarcely visibly dentate. Length, $5\frac{3}{4}$ - $7\frac{1}{2}$ mm.

Hab.—North-western Australia: Low Rocks and Queen Islet. Type in British Museum.

In general appearance close to *elegans*, but second joint of antennæ almost as long as first, instead of much shorter, head a trifle wider, and elytra with much more numerous setæ, forming several irregular rows on each interstice. On some specimens the scales on the under-surface have a faint golden or greenish gloss.

MYLLOCERUS HILLI, n. sp.

Blackish, legs of a rather pale red, antennæ somewhat darker, club still darker. Densely clothed with golden-green or golden scales, paler on legs than elsewhere, elytra with numerous irregularly transverse black spots, prothorax with three black stripes, a black spot behind each eye. Elytra with a row of rather long, suberect, pale setæ on each interstice, but becoming short on sides.

Head flat and rather long; inter-ocular fovea distinct. Eyes rather large and prominent. Rostrum slightly longer than wide, sides very feebly incurved, base and apex of even width; with a short medio-apical carina. Antennæ long and thin; scape strongly curved; two basal-joints of funicle unusually long, first about once and one-third the length of second. *Prothorax* lightly transverse, sides gently rounded, base strongly bisinuate, and scarcely wider than apex, which is truncate; with large punctures scattered about amongst smaller ones, but the latter normally concealed. *Elytra* much wider than prothorax; with rows of large, almost concealed punctures. *Legs* long; femora acutely dentate. Length, $4\frac{1}{2}$ mm.

Hab.—Northern Territory: Batchelor (G. F. Hill's No. 26), Darwin (E. W. Ferguson from F. P. Dodd). Type, I. 2728.

A very beautiful species. From *chrysideus* it differs in being considerably smaller, clothing with a decided golden gloss, eyes much more prominent, prothorax longer, antennæ longer and thinner, and elytral setæ longer. The setæ are more distinct than usual, but less upright and decidedly ⁺ inner than in *echinatus* and *suturalis*. From *gratus* it differs in being larger, rostrum longer, and elytra with conspicuous setæ. The conspicuously variegated clothing readily distinguishes from *darwinii*, and there are differences of sculpture as well.

MYLLOCERUS ARMIPECTUS, n. sp.

Black, legs obscurely reddish. Clothed with bright-green scales, variegated with feeble brownish spots. Elytra with an indistinct row of depressed setæ on each interstice.

Head rather short and wide, with a narrow inter-ocular impression. Eyes fairly large. Rostrum slightly wider than long, sides gently incurved to middle, base and apex equal, median carina narrow and distinct, the sublateral ones partially concealed. Antennæ moderately long; two basal-joints of funicle subequal in length. *Prothorax* twice as wide as the median length, apex lightly incurved to middle, sides rounded, gently increasing in width from apex to beyond middle, and then decreasing to base, which is distinctly wider than apex; with fairly large, partially concealed punctures, and remnants of a median carina. *Elytra* distinctly wider than prothorax, subparallel-sided to near apex; with regular rows of fairly large, partially concealed punctures. *Prosternum* with a rather small but acutely conical tubercle projecting backwards on to mesosternum. *Femora* stout, edentate. Length, 5-5¼ mm.

Hab.—Northern Territory: Darwin (G. F. Hill's No. 293).

Readily distinguished from all others of the genus by the prosternal tubercle. *Intercoxalis* and *prosternalis* each has an acute ridge there, but as the ridge is not conspicuously elevated posteriorly it has not the appearance of a tubercle. Those species also are different in many other respects. The prothorax of the type has a short vague dark stripe on each side and traces of another on the middle. A second specimen is rather badly abraded, but traces of the stripes are present.

SYNOMUS.

The typical species (*cephalotes*) of this genus was described as having ovate elytra no wider at the base than the prothorax, and with erect setæ. The clothing was apparently not variegated. The species appears to be unknown to Australian workers, but I have previously named a second one (*æruginosus*), and have now to name two others. Of these *ovipennis* has strongly rounded and highly convex elytra, very different to those of any other of the Australian allies of *Myllocerus*; most of its scales are greyish, but with conspicuous black markings. The other, *inconspicuus*, in outlines is nearer *æruginosus*, but is also clothed with greyish scales; it is quite apterous, as probably are all species of the genus. *Myllocerus subapterus* is a connecting link between it and *Myllocerus*.

SYNOMUS OVIPENNIS, n. sp.

Blackish-brown, some parts black, appendages obscurely diluted with red. Moderately densely clothed with greyish-white scales, variegated with black; with numerous more or less erect setæ, longer on elytra than elsewhere.

Head short; eyes subbasal and but feebly convex. Rostrum stout, almost as wide as head, sides feebly diminishing in width to apex, with a narrow median carina bifurcated in front, sublateral carinæ narrow and curved at insertion of antennæ. Antennæ rather thin; scape the length of front tibiæ; two basal-joints of funicle moderately long. *Prothorax* about once and one-half as wide as the median length, apex feebly incurved to middle, sides gently rounded and feebly decreasing in width to base, which is almost truncate; with fairly large but more or less concealed punctures. *Elytra* ovate, strongly convex, base no wider than base of prothorax, but almost twice as wide across middle; with regular rows of fairly large, partially concealed punctures. Length, $3\frac{1}{4}$ mm.

Hab.—Queensland: Cairns (Blackburn's collection). Type, I. 2930.

A small species curiously suggestive of some small spiders, on account of its comparatively large elytra, strongly projecting above the prothorax. On the type the scales on the head are mostly black, the prothorax has a wide black longitudinal vitta on each side, and the elytra have a transverse fascia just beyond the middle, but interrupted close to suture; there are also a few feeble spots towards the base. The elytra when viewed from behind are seen to have a regular row of setæ on each interstice.

SYNOMUS INCONSPICUUS, n. sp.

Black, appendages more or less obscurely diluted with red. Densely clothed with greyish-white and slaty-grey scales, irregularly distributed, but becoming almost uniformly pale on under-surface; with short scattered setæ, but on the elytra forming a regular row on each interstice.

Head rather wide, derm concealed. Eyes rather prominent. Rostrum about as long as the basal width, sides feebly diminishing in width to apex, median and sublateral carinæ moderately distinct in front, elsewhere concealed. Antennæ rather long; scape rather strongly curved, two basal-joints of funicle rather long and subequal. *Prothorax* rather lightly transverse, sides gently rounded, apex truncate, base lightly bisinuate. *Elytra* subovate, base no wider than base of prothorax but across middle about one-half wider; with rows of large, almost concealed punctures. Length, $3\frac{3}{4}$ -4 mm.

Hab.—Australia: Elder Expedition (R. Helms). Type, I. 2931.

The three specimens before me were very gummy and were passed over by the late Rev. T. Blackburn when dealing with the *Coleoptera* of the Elder Expedition. On being floated off and cleaned, however, two of them are in condition that leaves little to be desired. They are quite apterous, in which they differ from *Myllocerus subapterus*, which has wings, although too small to be used for flight.

SUBFAMILY LEPTOPSIDES.

LEPTOPS RECURVUS, n. sp.

♂. Black. Rather densely clothed with white or whitish scales, with stouter ones scattered about, but dense on legs.

Head with small, concealed punctures. *Rostrum* rather long, depressed along middle but not to base; sublateral sulci rather shallow and open posteriorly. *Antennæ* rather thin: second joint of funicle longer than first. *Prothorax* moderately transverse, shallowly depressed along middle, surface vermiculate, apex notched in middle. *Elytra* with rows of large punctures, and with rows of tubercles on the third, fifth, and seventh interstices, on the third and fifth rounded towards base, but becoming subconical and larger posteriorly, the largest crowning the posterior declivity, a small tubercle where the third and fifth unite near apex, on the seventh interstice the tubercles are fewer in number, but there is a very conspicuous recurved one on the shoulder. *Breast* unarmed. *Legs* rather long. Length, $9\frac{1}{2}$ -11 mm.

♀. Differs in being larger (11 - $14\frac{1}{2}$ mm.), legs and antennæ somewhat shorter, prothorax more transverse, and elytra considerably wider, with smaller and more obtuse tubercles.

Hab.—South Australia: Port Lincoln (Blackburn's collection). Type, I. 2719.

This species was incorrectly identified by the late Rev. T. Blackburn as *humeralis*, and with some reservations I previously accepted that identification⁽²¹⁾; but it is readily distinguished from that species, and from all others of the genus, by the strongly recurved humeral spine, which is alike on the five specimens before me.

LEPTOPS ROBUSTUS, Oliv.

humeralis, Germ.

Mr. Arrow informed me that the species I have as *robustus* (and apparently correctly so) was named in the

(21) See note under *robustus*.

British Museum as *humeralis*; and certainly it agrees well with the description of that species. It is true the rostrum was described as bicarinate, but the narrow median carina is not always present, and even when it is, is sometimes concealed by scales.

A specimen sent to me as *humeralis* by the late Rev. T. Blackburn is really not that species, but a new one, here described as *recurvus*. At the time I tabulated the genus⁽²²⁾ I had seen but the one specimen and noted⁽²³⁾ its discrepancies from the original description, but was under the impression that he had connecting forms, which, however, was not the case.⁽²⁴⁾ The table in consequence was inaccurate as regards *humeralis* and *hypocritus*. In the table, therefore, for *humeralis* substitute *recurvus*, and for *hypocritus* substitute *rhizophagus* var.⁽²⁵⁾

LEPTOPS RHIZOPHAGUS, n. sp.

♂. Black. Clothed with scales varying from grey or ochreous-grey to golden; the elevated parts with small, black, indistinct scales.

Head with small, dense punctures. Rostrum rather long; sublateral sulci deep and closed at both ends, narrowly impressed along middle, with an even ridge between same and each sublateral sulcus. *Prothorax* about as long as wide, widely and shallowly depressed along middle, transversely impressed before and behind middle, the sides vermiculate. *Scutellum* distinct. *Elytra* at extreme base scarcely wider than prothorax, but much wider beyond middle; with rows of large, partially concealed punctures; suture thickened but not tuberculate; third, fifth, and seventh interstices obtusely tuberculate. *Tibiae* denticulate on lower-surface. Length (excluding rostrum), 11-13 mm.

♀. Differs in being larger (14-16 mm.) and wider, prothorax somewhat transverse, elytra much larger, and legs somewhat shorter.

Hab.—South Australia: Wirrabara (S. H. Curnow). Type, I. 2720.

(22) Ann. Soc. Ent. Belge, 1906, pp. 314-316.

(23) *L.c.*, p. 330.

(24) There were three other specimens of the species standing in his collection as *humeralis*.

(25) The specimen I tabulated as *hypocritus* has a feeble median carina, and another specimen of the species has a still more feeble one, but on all the other specimens examined the rostrum is deeply but narrowly impressed along the middle.

The general appearance of both sexes is close to that of *robustus*, but it may be at once distinguished from that species by the suture. In *robustus* the suture at the summit of the posterior declivity is considerably thickened, and supplied with numerous granules or small tubercles; in the present species the suture there is entirely without granules or tubercles. The median groove of the rostrum is deeper than in *robustus*, and there are some minor distinctions. I had specimens of this species, and there are others in the Macleay Museum labelled as *hypocritus*, but as they did not agree with the description some were sent to Mr. Arrow for comparison with the type of that species, and of them he wrote: "Your *Leptops* is entirely different from *L. hypocritus*, which is smaller, with shorter and more rotund elytra, and completely covered with green or grey scales. The pronotum is scarcely wrinkled, but has a slight median canal in its anterior part only." In my table it would be associated with *cicatricosus* and *setosus*, to neither of which is it at all close. The scales, except the indistinct black ones, are more or less uniformly coloured throughout, on most specimens being of a more or less ashen-grey, but on several distinctly golden, sometimes with a rosy gloss, but not one of the numerous typical specimens has them green. They are sparse or absent from most of the elevated parts, so that, to the naked eye, the prothorax appears feebly striped, and the elytra conspicuously so. The tubercles on the odd interstices are small and obtuse, and cause them to appear like undulating ridges; they all terminate slightly below the summit of the posterior declivity. On the fifth they commence near the basal fifth, on the others at the base; near the base of the seventh there is a subconical one, larger than any of the others, but not very large.

Mr. Curnow informs me that the species is responsible for the destruction of many apple-trees by the larvæ eating the roots, apparently in much the same way as the larvæ of *robustus* and *squalidus* (*hopei*) do.

STENOCORYNUS VARIABILIS, Blackb. (formerly *Lipothyrea*).

This species was doubtfully referred to *Lipothyrea* by the late Rev. T. Blackburn, but it is a *Stenocorynus*. The original generic diagnosis of *Lipothyrea* is very faulty, and the genus will probably find a resting place in the *Tanyrhynchides*.

STENOCORYNUS SUBFASCIATUS, Pasc. (formerly *Leptops*).
S. neglectus, Lea.

Mr. Arrow has kindly sent a co-type of *Leptops subfasciatus*, Pasc. It is certainly a *Stenocorynus*, and is the

species I subsequently named *neglectus*. In addition to being referred to a wrong genus, the description of the antennæ and prothorax is misleading.

MANDALOTUS.

The number of species still to be described in this highly interesting genus of dingy weevils must be enormous. Although several new species were dealt with in these Transactions as recently as 1912 (pp. 76-80), eleven have now to be described, three species of which were obtained (two in considerable numbers) from a few square yards covered with fallen leaves at Mount Tambourine. Several others are also known to me, but their representatives being dirty or abraded they were not described, as they belong to the section of the genus without remarkable processes on the sterna or abdomen; a few also are not in South Australian collections. Many unmated females are also known to me, but, unless very distinctive, it is not desirable to name a species in the genus from females only.

Since my first table of the genus (1907, pp. 131-135) so many new forms have been named that a fresh one is desirable, especially as the positions of some of the species there noted were fixed in error, only their females being then known. The present table deals exclusively with males, except that two species, *interocularis* and *carteri*, are distinguished, *inter se*, by their females.

- ee*. Carina strongly arched.
f. Scutellum small and shining
ff. Scutellum not traceable.
g. Hind tibiæ denticulate on lower-surface
gg. Hind tibiæ not so denticulate
 DDD. Abdomen neither carinate nor tuberculate.
 EE. Metasternum bituberculate
 EE. Metasternum not bituberculate.
 F. Elytra tuberculate.
h. Hind tibiæ dentate at base
hh. Hind tibiæ not so dentate.
i. Under-surface with long clothing
ii. Under-surface without such.
j. Space between middle coxæ much greater than between front pair
jj. Space there not at all, or but little more than between front pair.
k. Front tibiæ rather conspicuously ciliated.
l. Hind tibiæ suddenly and strongly curved about apex
ll. Hind tibiæ not so curved
kk. Front tibiæ feebly ciliated at most.
m. Elytra fully twice as long as the basal width
mm. Elytra not twice as long as the basal width
 FF. Elytra non-tuberculate (at least elsewhere than about shoulders).
 G. Prothoracic granules transversely arranged or subcarinate.
n. Middle coxæ armed
nn. Middle coxæ not armed.
o. Hind tibiæ subdentate near base
oo. Hind tibiæ not subdentate.
p. Shoulders acutely produced
pp. Shoulders not so produced.
q. Posterior declivity uneven
qq. Posterior declivity even.
r. Abdominal clothing not concealing derm
rr. Abdominal clothing concealing derm.
s. Size above average
ss. Size very small.
t. Basal segment with a semicircular glabrous space at apex
tt. Basal segment without such
- sabulosus*
sydneyensis
minutus
metasternalis
scaber
mirabilis
campyloenemis
valgus
coatesi
irrasus
ferrugineus
dentipes
trisinuatus
acutangulus
transversus
crawfordi
setosus
abdominalis
areolatus

- GG. Prothoracic granules not transversely arranged.
- H. Scape very stout.
- u. Prothorax with large isolated granules or small tubercles ... *noticollis*
- uu. Prothoracic granules not large and isolated. ... *ammophilus*
- v. Base of rostrum suddenly elevated above head ... *herbivorus*
- vv. Base not suddenly elevated. ... *crassicornis*
- ww. Elytra without such spots at base ... *fergusoni*
- xx. Scape at most moderately stout. ... *punctiventris*
- I. Hind tibiæ armed.
- x. Elytra with a conspicuous post-humeral prominence ... *reticulatus*
- xx. Elytra without such ... *seticollis*
- yy. Basal segment with such. ... *caviventris*
- z. Elytral granules confined to suture ... *sterilis*
- zz. Elytral granules not so confined ... *similis*
- JJ. Prothoracic granules partially obscured or absent. ... *ochreonotatus*
- K. Front coxæ more or less widely separated.
- a. Suture between basal segments of abdomen almost obsolete in middle ... *blackmorei*
- aa. Suture distinct across middle. ... *piliventris*
- b. Prothorax (on abrasion) with very minute granules on disc. ... *ciliatus*
- c. Front tibiæ with long and moderately dense ciliation ... *foveatus*
- cc. Front tibiæ with rather short and feeble ciliation ... *avenaceus*
- bb. Prothorax (on abrasion) with large but almost obsolete granules ... *avenaceus*
- bbb. Prothorax (on abrasion) with distinct granules on disc.
- d. Front tibiæ densely ciliated at apex.
- e. Intercoxal process of abdomen with long setæ ... *avenaceus*
- ee. The process not so clothed ... *avenaceus*
- dd. Front tibiæ feebly ciliated.
- f. With a sudden and deep excavation common to meta-sternum and abdomen ... *avenaceus*
- ff. Without such an excavation.
- g. Front tibiæ dentate near middle ... *avenaceus*

- gg.* Front tibiæ not so armed.
h. Base of elytra conspicuously trisinate *humeralis*
hh. Base gently arcuate, or at most feebly trisinate.
i. Comparatively robust *albonotatus*
ii. Comparatively slender.
j. Elytra with a whitish spot on each side of scutellar region *angustipictus*
jj. Elytra without such spots.
k. Dividing line between front coxæ less than half the width of a coxa *angustus*
kk. Dividing line more than half the width of a coxa *rufimanus*
KK. Front coxæ not widely separated.
L. Scape much longer and thinner than usual *tenuicornis*
LL. Scape not as in *tenuicornis*.
M. Derm nowhere black *pallidus*
MM. Derm black, at any rate in parts.
N. Suture (on abrasion) decidedly paler than second interstice
NN. Suture black or almost so.
O. Front coxæ touching.
l. Club black or almost so *inuitatus*
ll. Club reddish.
m. Prothorax (on abrasion) with conspicuous granules
mm. Prothorax without such granules. *coxalis*
n. Metasternum and abdomen with golden clothing *muscorvus*
nn. Without such clothing.
o. Elytra with many pale spots *maculatus*
oo. Elytra without such spots *squamibundus*
OO. Front coxæ not touching.
P. Length of eyes greater than space between them *pusillus*
PP. Length less than space between them.
Q. Prothoracic sculpture not entirely concealed before abrasion *subglaber*
QQ. Prothoracic sculpture so concealed.
R. Hind tibiæ suddenly narrowed about the middle
RR. Hind tibiæ not so narrowed *cellaris*
spureus

NOTES ON TABLE.

B. *bb.* Some specimens of *niger* might almost be regarded as having the process subconical.

B. *ee.* This character is such a striking one that it has been used, although it is usually difficult, without breaking off a tibia, to see the carinæ clearly.

FF. *Transversus* is here included, as the transverse sculpture associates it with G; the elytra, however, might be regarded as subtuberculate.

K. *ff.* In *angustipictus* the metasternum and abdomen are widely depressed, but the depression is comparatively shallow.

K. *h.* A very small species, not at all likely to be confounded with any of the four following ones.

O. *Squamibundus* is included here, although the front coxæ do not appear to quite touch each other when viewed from behind. But it is not at all likely to be confused with any species of OO.

The following species are not included in the table, as their types are possibly females; but assuming that their types are males their positions would be as follows:—

Pondericornis. Would be placed with *crassicornis*, from which it differs in being more robust; rostrum shorter and much more convex, scape stouter and clothing different.

Latus and *rufipes.* These would be associated with *campylocnemis*, but they differ in many respects from that species; they may be readily distinguished thus:—

Front coxæ touching	<i>latus</i>
Front coxæ moderately separated	<i>rufipes</i>
Front coxæ widely separated	<i>campylocnemis</i>

MANDALOTUS GLABER, Blackb.

There are before me ten specimens, including seven males, that were standing in the late Rev. T. Blackburn's collection as *glaber*, or were so identified by him, and one of each sex was labelled as a co-type. The specimens certainly *look* as if they belonged to but one species, but they quite evidently belong to two, one of which is herein named *decipiens*. There is fortunately no doubt as to the typical form, the description of the hind tibiæ of the male being quite sufficient. The basal segment of the abdomen of the male was described as being "late concavo subinæquali"; as a matter of fact it has a granule or small tubercle on each side placed exactly in a line with the inner edge of the middle coxæ. The following comparison of characters, which are constant in three males

of *glaber* and four of *decipiens*, should render the identification of the males easy:—

Glaber.

Hind tibiæ notched near apex,⁽²⁶⁾ the apex itself with a strong inner spur.

Basal segment of abdomen conspicuously depressed along middle.

Distance between tubercles more than length of second segment in middle.

Dividing line between front coxæ more than half the distance between middle coxæ.

The females may also be distinguished by those of *glaber* being larger, abdomen less convex, and front coxæ more widely separated.

Decipiens.

Hind tibiæ not notched near apex, and apex not conspicuously spurred.

Basal segment rather feebly depressed.

Distance between tubercles less than length of second segment.

Dividing line less than half that distance.

MANDALOTUS PUNCTIVENTRIS, Blackb.

There are five co-types of this species in the Museum, only one of which, however, is a male. This specimen has, at the apex of the basal segment of abdomen, a curved shining line that appears to abruptly mark the apex of a semicircular space, but the curved line is not elevated above the space anterior to itself, so it cannot be regarded as a carina; nor does it encroach upon the second segment as in *ventralis*. Its middle tibiæ are armed with a distinct median tooth, and some smaller ones; the teeth are of a different character to those of *fergusoni*, and the elytra are very different to those of that species. The female, in general appearance, is very close to some females of *ventralis*, but has a much thinner scape and longer elytral setæ.

MANDALOTUS ADVENUS, Blackb.

There are two co-types (sexes) of this species in the Museum. The male has the basal abdominal segment carinated at the apex, the carina being rather short and straight. Some years ago the late Rev. T. Blackburn, in answer to an enquiry, wrote of this species: "Would fall in your table beside *bryophagus*. Its front coxæ undoubtedly touch each other. I suppose *adventus* differs from *bryophagus* by, *inter alia*, hind tibiæ angularly dilated within." It seems to me, however, that the front coxæ do not quite touch each other, and the species therefore would be associated in my former

(26) Not visible from certain directions, but very distinct from others; when clearly visible the tibiæ at the notch appear to be suddenly and strongly narrowed, with the apical spur overhanging the notch.

table with *blackburni*, from which it is at once distinguished by the hind tibiæ, and by the abdominal carina being straight, with its ends on the apex; whereas in *blackburni* and *bryophagus* the carina is distinctly curved and the ends are not on the apex.

MANDALOTUS BLACKMOREI, Lea.

The typical specimens of this species have the rostral carina uncovered throughout; this is also the case with the majority of numerous specimens subsequently taken at Sydney by Mr. Carter, but a few have the carina uncovered only at apex.

Recently I obtained under a stone, near the beach at Port MacDonnell (South Australia), eleven specimens that appear to belong to the species, but differ in having the carina normally quite concealed. These specimens also average a trifle smaller than the others, but I cannot find distinctions sufficient to warrant their specific separation.

MANDALOTUS CARTERI, Lea.

This species was distinguished from *sabulosus* and *sydneyensis*, in my former table, by the raised alternate interstices of elytra. Additional specimens, however, denote that these are sometimes so feebly elevated that they do not appear to be higher than the others. The species occurs in Victoria (Mounts Hotham and Buffalo) and South Australia (Lucindale), as well as in New South Wales.

MANDALOTUS NIGER, Lea, var. (?)

A specimen from the Blue Mountains (Blackburn's collection) differs from the previously described males of this species in having the intercoxal process of the mesosternum wider and truncate at tip; in the normal form the process is intermediate between the laminated and pointed ones. In *simulator*, whose prothorax, however, is very different, the process is somewhat longer, but also truncate at tip.

M. ALBONOTATUS, Lea. *Hab.*—Lucindale.

M. ARCUATUS, Lea. *Hab.*—Nelson (Victoria).

M. SIMILIS, Lea. *Hab.*—Mount Lofty, Murray Bridge, Adelaide.

M. ARCIFERUS, Lea. *Hab.*—Mount Gambier.

MANDALOTUS LATENS, n. sp.

♂. Black; appendages, and sometimes the elytra and abdomen, of a more or less dingy-red. Densely clothed with muddy-brown scales, interspersed with decumbent setæ.

Rostrum rather stout and more dilated to near apex than usual, carina normally uncovered only about apex. Antennæ rather short; first joint of funicle distinctly longer and stouter than second. *Prothorax* with numerous normally quite concealed granules. *Elytra* conjointly arcuate at base, not much longer than wide, a subtubercular elevation near each shoulder; with rows of large, normally concealed punctures; alternate interstices moderately elevated. Basal segment of *abdomen* with two small tubercles at extreme apex. Front *coxae* rather widely separated; tibiæ lightly curved. Length, $2\frac{1}{4}$ - $2\frac{3}{4}$ mm.

♀. Differs in being somewhat larger; and basal segment of abdomen more convex and without tubercles.

Hab.—Queensland: Mount Tambourine, from rotting leaves (A. M. Lea). Type, I. 2708.

A small species with two tubercles at tip of first abdominal segment as in the following species, but the segment itself gently convex in middle, instead of slightly concave, the whole insect decidedly wider, and the alternate interstices elevated.

MANDALOTUS LUTOSUS, n. sp.

♂. Blackish, antennæ and tarsi of a rather dingy-red. Densely clothed with muddy-brown scales, interspersed with stout decumbent setæ.

Rostrum with carina concealed. First joint of funicle distinctly longer than second. *Prothorax* with numerous rather large granules, readily traceable before abrasion. *Elytra* rather feebly arcuate at base, about twice as long as the basal width, widest about middle; with rows of large, more or less concealed punctures; interstices regular. Basal segment of abdomen with two small tubercles at extreme apex. Front *coxae* widely separated; tibiæ lightly curved. Length, $2\frac{3}{4}$ mm.

♀. Differs in being wider, abdomen more convex and without tubercles.

Hab.—Australia (Blackburn's collection). Type, I. 2709.

Allied to *glaber* and *geminatus*, but with the small tubercles at the extreme tip of the first segment of abdomen instead of slightly before same. In general appearance, however, it is not at all close to either of those species. One of the specimens bore a purplish-red label of Mr. French's, probably indicating that it was from Victoria.

MANDALOTUS DECIPIENS, n. sp.

♂. Black, shining, antennæ (club excepted) and parts of tarsi more or less red. Upper-surface with short, sparse,

suberect setæ, and a few indistinct scales; under-surface more noticeably but still sparsely clothed; tibiæ conspicuously ciliated.

Head with dense punctures. *Rostrum* rather suddenly dilated at apex; with dense punctures, and a rather feeble median carina. First joint of funicle about as long as second and third combined. *Prothorax* with rather strongly and evenly rounded sides; sides with obtuse granules; disc with scattered punctures and without granules; with a fine median line. *Elytra* conjointly arcuate at base; with rows of fairly large punctures; interstices regular, each with a row of small punctures, and with some very small ones. Basal segment of *abdomen* gently depressed along middle, with two small tubercles near, but not at apex, the space between them decidedly less than the length of second segment. Front *coxæ* widely separated; femora very stout; tibiæ conspicuously ciliated, front pair feebly serrated on lower-surface, thickened near base, and incurved between apex and thickened portion. Length, $4\frac{1}{2}$ - $4\frac{3}{4}$ mm.

♀. Differs in having elytra more ovate, abdomen more convex and non-tuberculate, and front tibiæ less dilated near base, and less incurved about apex.

Hab.—Victoria: Mounts Baldi and Hotham (Blackburn's collection). Type, I. 2710.

In general appearance strikingly close to *glaber*, but distinguished by characters of the legs and under-surface; for these see comments under *glaber*.

MANDALOTUS SQUALIDUS, n. sp.

♂. Black, antennæ and parts of legs of a more or less dingy-red. Densely clothed with muddy-brown scales, thickly interspersed with stout setæ.

Rostrum with carina distinct throughout. *Prothorax* with numerous granules, fairly distinct through clothing. *Elytra* subovate, base conjointly arcuate; with rows of fairly large, almost concealed punctures; interstices regularly convex. Second segment of *abdomen* with two small, almost conjoined, tubercles in middle. Front *coxæ* widely separated; front tibiæ lightly bisinuate. Length, $3\frac{1}{2}$ mm.

Hab.—South Australia: Adelaide (A. M. Lea). Type, I. 2711.

With two small tubercles on second abdominal segment as in *amplicollis*, but apex of front tibiæ not suddenly and strongly curved inwards, clothing different, and size much smaller.

MANDALOTUS MINUTUS, n. sp.

♂. Black or blackish, antennæ and parts of legs reddish. Rather densely clothed with obscurely variegated scales, and with rather sparse setæ interspersed; ciliation of tibiæ rather sparse but conspicuous.

Rostrum with carina normally concealed. *Prothorax* with small dense granules, scarcely traceable before abrasion. *Elytra* conjointly arcuate at base; with rows of fairly large punctures, appearing much smaller through clothing; interstices evenly convex. Basal segment of *abdomen* with a rather strongly curved, semi-double carina, its middle at apex of segment. Front *coxæ* widely separated; tibiæ rather thin, apex dilated. Length, 3 mm.

Hab.—South Australia: Kangaroo Island, close to sea beach (A. M. Lea). Type, I. 2712.

In size and general appearance fairly close to *bicarinatus*, and like that species the apex of second abdominal segment appears to be carinated, but the front *coxæ* are very widely separated, the distance between them being fully equal to that between the middle *coxæ* of that species. The carina is more strongly arched than in *imitator*, and less so than in *carteri*, *sabulosus*, and *sydneyensis*, but it is a much smaller insect than all of those.

MANDALOTUS FERRUGINEUS, n. sp.

♂. Black, antennæ and parts of legs of a dingy-red. Densely clothed with rusty-brown scales; with numerous similarly-coloured setæ, longer and more conspicuous on the legs than elsewhere.

Rostrum with carina normally concealed. Two basal-joints of funicle rather long and subequal, their combined length equal to the five following combined. *Prothorax* rather convex, sides strongly rounded; disc uneven and with numerous more or less concealed granules. *Elytra* irregular at base, shoulders strongly projecting, surface very uneven; with rows of large, almost concealed punctures. Basal segment of *abdomen* feebly depressed. Front *coxæ* rather widely separated, middle pair separated about same distance, with a strong longitudinal carina; front tibiæ rather strongly curved about apex, the curved portion denticulate, apex mucronate, glabrous internally, four hind tibiæ glabrous on lower-surface, the hind pair rather suddenly dilated at apex, and obtusely bidentate at lower apex. Length, 6-7½ mm.

♀. Differs in being more robust, abdomen convex, middle *coxæ* scarcely carinated and tibiæ less incurved about apex and otherwise different.

Hab.—Queensland: Mount Tambourine, in rotting leaves (A. M. Lea). Type, I. 2713.

A rough, rusty-looking insect, allied to *coatesi* and *irrasus*, but larger and wider, with the middle coxæ closer together, and the front tibiæ different; from the former also it differs in having the elytra much more conspicuously tuberculate. In many respects it is close to *valgus*, but the clothing of the abdomen of the male is very different, the front tibiæ have the apical mucro directed downwards instead of forwards, and the hind tibiæ are much less curved and otherwise different at apex. The elytra are quinque-sinuate at the base, owing to the suture there being bifurcated, and to the third interstice being subtuberculate. There are numerous small rounded tubercles scattered about, and several form a distinct curved row at summit of posterior declivity; each shoulder has a stout, oblique lateral elevation. The distance between the middle coxæ at their middle is no greater than that between the front pair, if as much, and each has a longitudinal ridge or carina which, when viewed directly from in front, appears like a subconical tubercle (much as in *valgus*).

MANDALOTUS TRANSVERSUS, n. sp.

♂ (?). Black, antennæ and parts of legs of a more or less dingy-red. Densely clothed with rather light-brown, feebly variegated scales, thickly interspersed with stout suberect setæ, longer on legs than elsewhere.

Rostrum with carina conspicuous throughout, with a few setiferous granules; apical plate distinctly elevated above the adjacent parts. Antennæ rather stout. *Prothorax* with many conspicuous transverse impressions, sides strongly rounded. *Elytra* rather wide, surface somewhat uneven, especially posteriorly, but scarcely tuberculate; with rows of large punctures, appearing very small through clothing. *Abdomen* wide, basal segment scarcely convex in middle. Front coxæ widely separated, tibiæ somewhat curved at apex. Length, $4\frac{3}{4}$ - $5\frac{1}{4}$ mm.

Hab.—New South Wales: Dorrigo (W. Heron). Type, I. 2714.

The three typical specimens appear to belong to but one sex, probably the male. Regarding the elytra as tuberculate the species would be associated with *campylocnemis*, from which it differs in many respects. But regarding them as non-tuberculate it would be associated with *setosus*, from which it differs in having wider elytra, posterior declivity irregular, antennæ shorter and stouter, and tibiæ different. The other species with granules transversely arranged are all much smaller. From some directions the elytra, owing to a

slight elevation of the third interstice on each, appear to be trisinate at base, but from others they appear to be conjointly arcuate.

MANDALOTUS CILIATUS, n. sp.

♂. Black, antennæ and parts of legs of a dingy-red. Densely clothed with muddy-brown scales, thickly interspersed with setæ; tibiæ with long and conspicuous ciliation, the middle pair less noticeably so than the others.

Rostrum with carina normally concealed. *Prothorax* rather wide, sides strongly rounded; with numerous granules, normally concealed but distinct on abrasion. *Elytra* conjointly arcuate at base, greatest width scarcely equal to that of prothorax; with rows of large, normally indistinct punctures; alternate interstices feebly elevated. Basal segment of *abdomen* widely depressed in middle. Front *coxæ* widely separated; front tibiæ rather strongly curved at apex, conspicuously ciliated, apex terminated by a small sharp spur. Length, 5 mm.

Hab.—Victoria: Nelson (Blackburn's collection). Type, I. 2715.

In general appearance close to *piliventris*, but abdomen of male without long setæ between the hind coxæ. The front tibiæ of that species are shining internally (as in the present one) but the depth is almost even from near base to apex, in the present species the tibiæ are rather stout near base, and then distinctly narrow to near apex, the apex itself being dilated and terminated by an acute spur.

Two females are associated with the type, but they possibly belong to a different species, as they are considerably smaller; they have the rostral carina distinct throughout.

MANDALOTUS ABDOMINALIS, n. sp.

♂. Black, antennæ, legs, and part of abdomen reddish. Densely clothed with muddy-brown feebly variegated scales, thickly interspersed with stout suberect setæ; ciliation of tibiæ inconspicuous.

Rostrum with carina normally concealed. Antennæ rather short. *Prothorax* widest slightly in advance of middle; with large almost concealed granules or short ridges; with a vague median line. *Elytra* short, base almost truncate, widest just behind shoulders, where the width is slightly more than that of the prothorax; with rows of large, almost concealed punctures; alternate interstices moderately elevated. Basal segment of *abdomen* with a semicircular glabrous space at apex. Front *coxæ* widely separated; front tibiæ moderately curved at apex. Length, $2\frac{1}{2}$ - $2\frac{3}{4}$ mm.

♀. Differs in being more robust, abdomen more convex, and without a semicircular glabrous space, and the tibiæ less curved.

Hab.—Queensland: Mount Tambourine, in rotting leaves (A. M. Lea). Type, I. 2716.

In general appearance strikingly like *latens*, and obtained from the same lot of rotting leaves. I had, in fact, the two species mounted together, but in floating them off and examining the abdomen the males were seen to belong to two different sections of the genus. The present species has no tubercles on the basal segment of abdomen, but has an abruptly terminated semicircular shining space, not encroaching on the second segment (as in *ventralis*) nor terminated by a carina, as in so many species of the genus, but bent down at the tip; it is, in fact, much as in *punctiventris*, which, however, differs in many other features. Before abrasion the prothoracic granules are so indistinct that it is difficult to see how they are disposed, but on abrasion they are seen to be large and in the form of short transverse or oblique ridges. Consequently in the present table the species should be placed with *arcuatus*. But as the transverse arrangement is less conspicuous than in other species and is not at all traceable before abrasion, I originally placed it in the table immediately after *avenaceus*; from all the species following that one, up to and inclusive of *rufimanus*, it is readily distinguished by the abdomen.

The females of this species and of *latens* are indistinguishable before abrasion, but when the scales have been removed the prothoracic granules are distinctive.

MANDALOTUS ANGUSTUS, n. sp.

♂ (?). Black, antennæ and tarsi reddish. Densely clothed with light-greyish, feebly variegated scales, interspersed with suberect setæ; ciliation of tibiæ inconspicuous.

Rostrum but feebly dilated near apex, median carina distinct throughout. *Prothorax* not much wider than long, sides rather lightly rounded; with numerous partially concealed granules; with a vague median line. *Elytra* comparatively long, base conjointly arcuate and closely applied to prothorax; with rows of large punctures, appearing very small through clothing; interstices regularly convex. Basal segment of *abdomen* almost flat in middle. Front *coxae* moderately separated, the dividing line between them less than half the width of a coxa; front tibiæ lightly curved at apex. **Length**, 4-4½ mm.

Hab.—Queensland: Toowoomba (Blackburn's collection). Type, I. 2717.

A rather narrow densely-clothed species, in general appearance something like *ammophilus*, but with very different antennæ and front coxæ rather widely separated. The elytral setæ are in quite regular rows.

There are three specimens in the Museum, one of which has the basal segment of abdomen rather more convex than the others, so that it is probably a female.

MANDALOTUS RUFIMANUS, n. sp.

♂ (?). Black, antennæ and tarsi reddish. Densely clothed with muddy-brown obscurely variegated scales, thickly interspersed with setæ.

Rostrum with carina distinct throughout. *Prothorax* with numerous partially concealed granules. *Elytra* oblong-cordate; with rows of fairly large punctures, appearing small before abrasion; interstices evenly convex. Basal segment of *abdomen* flat across middle. Front *coxæ* widely separated, the dividing line between them more than half the width of a coxa, front *tibiæ* moderately curved about apex. Length, 3-3 $\frac{1}{4}$ mm.

Hab.—South Australia: Adelaide, obtained by means of a sweep-net at night from lucerne (A. M. Lea). Type, I. 2718.

The four specimens before me appear to be all males.

POLYPHRADES INSIGNIPENNIS, n. sp.

♂. Black. Densely clothed with brownish-grey scales, sometimes with a vague golden gloss; in addition with numerous short and mostly depressed setæ, more distinct on suture on posterior declivity than elsewhere.

Head with narrow, longitudinal impressions, vaguely traceable through clothing; separated from rostrum by a distinct transverse impression. *Rostrum* with punctures concealed, except on apical triangle, where they are small. *Antennæ* stout. *Prothorax* moderately transverse, sides strongly rounded; with dense, depressed granules. *Elytra* at base the width of base of prothorax, sides obliquely and rather strongly increasing in width to near middle, then strongly arcuate to near apex, and then produced near apex; with rows of fairly large punctures, becoming small posteriorly; third interstice conspicuously elevated at basal fourth. Four front *tibiæ* denticulate on lower-surface. Length (♂, ♀), 7-8 mm.

♀. Differs in having the prothorax less transverse,

elytra with sides rounded from near base, a slight emargination beyond middle, apex not trilobed, and third interstice not conspicuously elevated at base; legs somewhat shorter and denticulation of tibiæ very feeble.

Hab.—North-western Australia: Parry Island and Queen Islet. Type in British Museum.

A remarkably distinct species in a genus of gloomy and usually closely-allied weevils. On the male the sides of the elytra about the middle are subangularly dilated, and near the apex they appear tuberculate, owing to the space between the second and fifth interstices being somewhat prolonged, in consequence the apex appears to be trilobed, with the median lobe somewhat in advance of the others. The incurvature of the sides that starts about the middle allows free movements to the hind femora. On the female there is a feeble notch on each side just where it is touched by the femur.

POLYPHRADES CRASSICORNIS, n. sp.

♂. Black. Densely clothed with muddy-grey scales, becoming paler, and sometimes with a bluish gloss, on muzzle, under-surface, and legs. In addition with dense, short, sub-erect setæ.

Head wide and rather convex; punctures concealed; with a narrow median line, continued to apical triangle of rostrum. Rostrum short, narrowed from base to apex, without a transverse basal impression. Antennæ stout; scape scarcely more than half the length of funicle and club combined; basal-joint of funicle as long as three following combined. *Prothorax* rather strongly transverse, sides strongly rounded; with dense flattened granules. *Elytra* at base slightly wider than base of prothorax, sides parallel for a very short distance, then strongly rounded, and widest just before middle (where the width is slightly more than the middle of prothorax); with rows of large, partially concealed punctures, becoming smaller posteriorly; third interstice decidedly elevated and thickened at base, but becoming level with the others before the basal fourth. *Legs* rather stout; four front tibiæ feebly denticulate. Length, 5-6 mm.

♀. Differs in having the sides of prothorax slightly less dilated and the elytra with the third interstice very feebly elevated at the base.

Hab.—Northern Territory: Batchelor and Darwin (G. F. Hill's No. 308). Type, I. 3331.

The unusually short rostrum, stout antennæ and legs, and conspicuously elevated base of third interstice of male, should render this a fairly distinct species.

POLYPHRADES COLLARIS, n. sp.

♂. Black. Densely clothed with muddy-grey or brownish-grey scales, becoming paler, and sometimes with a metallic lustre on muzzle, under-surface, and legs. In addition with short dense setæ, more distinct on elytra than elsewhere.

Head with dense, partially concealed punctures. Rostrum short, with a conspicuous transverse impression at base. Antennæ stout, scape almost as long as funicle, first joint of funicle scarcely as long as second and third combined. *Prothorax* twice as wide as long, sides increasing, with a somewhat sinuous outline, from apex to base; with small dense granules, somewhat transversely arranged. *Elytra* at base much narrower than base of prothorax, sides at base feebly notched, and then widely rounded; with rows of fairly large, subquadrate, partially concealed punctures; interstices flat or gently convex. *Legs* stout, four front tibiæ denticulate. Length (♂, ♀), 5-6½ mm.

♀. Differs in having the prothorax with the basal half almost parallel-sided, and the base itself abruptly truncate.

Hab.—Northern Territory: Batchelor (G. F. Hill's No. 299), Darwin (N. Davies). Type, I. 3332.

The prothorax is remarkable. On the male the sides are gently rounded from about the apex to the basal third, where they are slightly but noticeably dilated to the base, the base itself being considerably wider than the base of the elytra, and quite as wide as the widest portion of same. On the female the sides are evenly rounded and gently increase in width to the extreme base, which is considerably wider than the base of the elytra, although slightly narrower than the widest part of same. On the males of *paganus*, *nanus*, and of several other species the middle of the prothorax is considerably wider than the base of the elytra, but towards the base it decreases in width. On the present species the sides are not at all diminished towards the base, and in consequence the numerous specimens sent by Mr. Hill all appear to be compounded of two specimens; the head and prothorax of one, attached to the body of a smaller specimen.

POLYPHRADES BASIROSTRIS, n. sp.

♂. Black. Densely clothed with muddy-grey or rusty-grey scales, becoming paler on muzzle, under-surface, and legs. In addition with short, dense setæ; more distinct on elytra than elsewhere.

Head wide, almost flat between eyes; with dense, concealed punctures. Eyes rounder and more convex than usual. Rostrum short, with a conspicuous transverse impression at

base. Antennæ stout; scape somewhat shorter than funicle; first joint of funicle not as long as second and third combined. *Prothorax* strongly transverse, sides strongly rounded and widest at about basal fourth, with small dense granules. *Elytra* at base slightly narrower than base of prothorax, sides rather strongly rounded and widest at basal third; with rows of large partially concealed punctures. *Legs* stout, four front tibiæ denticulate. Length (σ , ♀), $4\frac{1}{2}$ - $6\frac{1}{2}$ mm.

♀ . Differs in having the sides of the prothorax much less rounded, base distinctly wider than apex, elytra wider at the base, the sides less dilated, and their greatest width about the middle.

Hab.—Northern Territory: Melville Island (W. D. Dodd), Bathurst Island (G. F. Hill's No. 353). Type, I. 3330.

In general appearance rather close to *setosus*, but transverse impression at base of rostrum quite distinct before abrasion; whereas on that species it is normally concealed; the prothoracic sculpture is also not transversely arranged, as on that species. Before abrasion the elytral striation is distinct, but the punctures appear to be very small and almost absent posteriorly; on abrasion, however, those of the male are seen to be subquadrate, and quite as wide as the interstices near the base; on the female, however, they are somewhat smaller.

POLYPHRADES MARMORATUS, n. sp.

Black, antennæ and tarsi more or less reddish. Densely clothed with whitish or greyish scales, mottled with pale-brown; muzzle and under-surface usually with a golden, or silvery, or green lustre, or a rosy flush. *Setæ* depressed and fairly numerous, but not very distinct.

Head wide, rather convex; with small, dense, concealed punctures. *Rostrum* very short, narrowed to apex, with a vaguely traceable median line, without a transverse basal impression. Antennæ moderately stout; scape shorter than funicle; first joint of funicle slightly longer than second and third combined. *Prothorax* strongly transverse, sides strongly rounded, base and apex of equal width; with small or moderate, normally concealed punctures, and without granules. *Elytra* subovate, base the width of base of prothorax, widest at about basal third; with rows of normally almost, or quite, concealed punctures. *Legs* short; front tibiæ lightly, the middle pair feebly denticulate. Length, 3 - $3\frac{1}{2}$ mm.

Hab.—South Australia: Murray Bridge (A. M. Lea). Type, I. 3212.

Smaller than *inconspicuus*, *lætus*, and *parvus*, and prothorax considerably wider in proportion, and with very different punctures. On abrasion the prothorax of each of those species is seen to be densely granulate-punctate; whilst that of the present species is covered with dense punctures, of small but not uniform size, and without a trace of granules. *Pusillus* and *perplexus* have the prothorax smaller in proportion, but with coarser punctures. A still smaller (but undescribed) species occurs in Tasmania. The derm is sometimes of a dingy-red. The clothing appears to be easily abraded, but even on specimen in perfect condition the markings are seldom sharply defined. The male differs from the female in having the prothorax wider and with more strongly rounded sides; but a long series of specimens indicates that it is not always easy to identify the sexes with certainty.

ESSOLITHNA MEDIOFUSCA, n. sp.

Black. Densely clothed with dingy, fawn-coloured scales, in places stained with sooty patches or stripes, and in places with paler spots; muzzle, under-surface, and legs with greyish or whitish scales. In addition with numerous stout, depressed setæ.

Head wide with dense, concealed punctures; with a narrow median line continued to apical triangle on rostrum. Rostrum short, sides above scrobes slightly sinuous. Antennæ stout; scape short, thickened at apex, and somewhat curved; first joint of funicle almost as long as the two following combined. *Prothorax* moderately transverse, sides evenly rounded; densely covered with small, rounded granules, except at apex. *Elytra* subcordate-ovate, widest about middle; with regular rows of large, round punctures, appearing very small through clothing. *Legs* short and stout. Length, 5-6 mm.

Hab.—Northern Territory: Alexandria (W. Stalker). Type in British Museum.

In general appearance fairly close to *echimys*, but scape much shorter, and elytral setæ but feebly elevated above the scales, instead of appearing as rather long erect hairs. *Seriata* and *rhombus* have the scape similar, but clothing very different. On the elytra there are numerous feeble pale spots in the striæ, the spaces between the spots being darker than elsewhere; some specimens in consequence appear to have alternating sooty and fawn-coloured stripes. On the prothorax there is usually a large subtriangular median sooty blotch, but in the middle of the blotch there is a longitudinal pale vitta; the sides are also sometimes feebly infuscated.

But the markings are usually feeble and (on the fourteen specimens taken by Mr. Stalker) never sharply defined.

ESSOLITHNA PUNCTICOLLIS, n. sp.

Black. Densely clothed with slaty-grey scales, with numerous snowy-white ones scattered about, and on each elytron condensed to form a conspicuous spot on the middle of the seventh interstice. In addition with numerous larger scales (or very stout setæ) resting upon the surface.

Head wide; with dense concealed punctures; front with a narrow median line, continued to middle of rostrum. Rostrum about as long as wide, sides between scrobes somewhat rounded in front, but almost parallel to between eyes. Scape short and unusually stout; first joint of funicle as long as three following combined. *Prothorax* moderately transverse, sides evenly rounded; with dense and rather coarse, partially concealed punctures. *Elytra* subcordate, widest at about basal third; with rows of large, partially concealed punctures. *Legs* short and stout. Length, 7-10 mm.

Hab.—Western Australia: Lake Austin (Blackburn's collection), Lennonville, Mullewa (Miss J. F. May). Type, I. 3215.

The largest known species of the genus. Its nearest ally appears to be *cordipennis*, which is a much smaller species, with very different antennæ. The clothing is somewhat variable, but the conspicuous white spot, on the seventh interstice on each elytron, is alike on six specimens. On the sides of the head and on parts of the under-surface and legs the white scales are also fairly dense, but elsewhere they are scattered singly. The prothorax, to the naked eye, appears to have three infusate lines, but these are really due to absence of white scales. On abrasion the head and rostrum are seen to be densely covered with subconfluent punctures, the median line common to both is continued as a ridge from the middle of the rostrum to the apical triangle, the space on each side of the ridge being depressed. On abrasion also the prothorax is seen to be entirely without granules, a most unusual feature in the genus; but the tarsi, each terminated by a single claw, are conclusive that the species should not be referred to *Polyphrades*. The elytral punctures are usually about the width of the interstices, in some places slightly less, in others slightly more; before abrasion, however, they appear to be much smaller, and in fairly deep striæ. The interstices are densely covered with small, normally quite concealed punctures.

SUBFAMILY MOLYTIDES.

APHELA PHALERIOIDES, Pasc.

This species was doubtfully recorded as from Queensland. Some specimens from Adelaide (Macleay Museum) and Cape Leeuwin and Roebuck Bay (British Museum) agree with the description and differ from *helopoides*, as *phalerioides* is stated to do. They also differ from that species in having the elytral punctures not perfectly regular on some of the interstices, especially on the third and seventh. Both sexes have the front tibiæ produced at the outer apex, but in addition the male has the basal-joint of each of the front tarsi strongly produced externally.

SUBFAMILY GONIPTERIDES.

OXYOPS HYPEROIDES, Pasc. (*Gonipterus*).*O. simplex*, Lea.

There is a specimen in the collection of the late Rev. T. Blackburn labelled as *Gonipterus hyperoides*, and I think correctly so. The species, however, is not a *Gonipterus*, but an *Oxyops*, and has been redescribed by me under the name of *O. simplex*.

OXYOPS PALLIDA, Lea.

There are eleven specimens in the British Museum that probably belong to this species. They are from Alexandria (Northern Territory) and marked as having been taken on young shoots of the "Desert Box." They all have a sprinkling of ochreous meal that on the prothorax causes an appearance as of three moderately distinct lines, and many of the elytral punctures are filled with the meal.⁽²⁷⁾ The elytra also have numerous vague spots (distinct to the naked eye) caused by the compacting together of a few large scales behind some of the seriate punctures.⁽²⁸⁾ The specimens, with one exception, are slightly larger than the type, and two of them are of a rather dark-brown.

OXYOPS OBSCURA, Blackb. (formerly *Medicasta*).*O. minuscula*, Lea.

The type of *Medicasta obscura* is in the Museum, and it is certainly an *Oxyops*, and also the species subsequently named by myself as *O. minuscula*. Mr. Blackburn appeared to have some slight doubts as to its correct generic position,

(27) The meal would be lost in alcohol, and the type was probably sent in that preservative to Mr. French.

(28) Of these spots there is not a trace on the type.

and he appears to have overlooked it when referring another species to *Medicasta*.

PANTOREITES ARCTATUS, Pasc. (formerly *Oxyops*).

P. brevirostris, Lea.

Mr. Arrow has kindly sent a co-type of *Oxyops arctatus*, Pasc. It is quite obviously a *Pantoreites*,⁽²⁹⁾ and is the species I subsequently named *P. brevirostris*. In addition to being referred to a wrong genus, the original description is grossly misleading.

PANTOREITES TRIVIRGATUS, n. sp.

Dark reddish-brown, in places almost black. Head and rostrum, and under-surface and legs, and three lines on prothorax and on elytra with dense snowy-white scales; the interspaces on prothorax and elytra with thinner, and more or less stramineous scales or setæ.

Rostrum moderately long, about twice as long as wide, slightly wider near apex than elsewhere. *Prothorax* moderately transverse, sides parallel on basal half and then rounded to apex; with dense, large punctures. *Elytra* elongate-subcordate, distinctly wider than prothorax, sides decreasing in width from shoulders to apex; with rows of large, almost or quite concealed punctures; interstices with normally concealed punctures and minute granules. *Tibiæ* denticulate. Length, 5-6 mm.

Hab.—Western Australia: Southern Cross (H. W. Brown). Type, I. 2722.

At a glance somewhat like *longirostris*, but rostrum much shorter and stouter, and elytra with a conspicuous white vitta along suture from base to apex. From *micans* and *trilinealbus*, which also have a sutural vitta, it differs in the rostrum being considerably longer, elytra with the space between the suture and the vitta near each side, with four distinct interstices clothed with setæ instead of scales, and the sublateral vitta confined to one interstice, or at most two, on each elytron. *Vittatus* has five white lines on each elytron. The five typical specimens appear to have been originally covered with a greasy meal, which has caked in places.

SYARBIS PULCHELLUS, n. sp.

Reddish, in parts flavous; base of elytra and four large, round, postmedian spots dark-brown, parts of under-surface infusate; with white or whitish scales, irregularly distributed, but forming a distinct median line on prothorax,

⁽²⁹⁾ A genus proposed by Pascoe himself, in the same paper (Journ. Linn. Soc., 1869, p. 462), as that containing the description (p. 482) of *arctatus*.

and a less distinct transverse one, dense on the scutellum, and margining each of the postmedian spots.

Head strongly constricted behind eyes, and strongly impressed between same. *Prothorax* almost as long as the width at base, regularly decreasing in width from base to apex; with large punctures, each containing a scale. *Elytra* much wider than prothorax, with regular rows of large, round, deep punctures, fourth interstice with an elongated tubercle near base, and a tubercle on each shoulder. *Tibiae* each with three or four strong black teeth. Length, 5-5½ mm.

Hab.—Western Australia: Ankertell, Cue (H. W. Brown). Type, I. 2721.

A beautiful and very distinct species. The four large, eye-like spots on the elytra are in a transverse series.

SYARBUS EUCALYPTI, n. sp.

Of a rather pale reddish-castaneous. With numerous erect fascicles of stramineous or rusty scales, the interspaces with numerous erect scales; under-surface with paler scales.

Head strongly constricted behind eyes, and strongly impressed between same. Eyes reniform. *Prothorax* moderately transverse, base much wider than apex; with dense, round, and rather large, partially concealed punctures. *Elytra* considerably wider than prothorax; with regular rows of large, round, deep punctures, subtuberculate beneath many of the fascicles. *Tibiae* each with a strong apical tooth and some smaller ones. Length, 5½-6 mm.

Hab.—Northern Territory: Alexandria. Type in British Museum.

Allied to *fasciculatissimus*, but with many more fascicles on prothorax and elytra. On that species the elytral fascicles are fairly large, with the interspaces glabrous or at most sparsely clothed. On the present species there are numerous small fascicles between the larger ones, both on the prothorax and elytra, and the interspaces are clothed with rather numerous erect setæ. Over all there is a brick-coloured dust, which, however, is easily removed by water or alcohol. The fourth interstice on each elytron about the middle has an elongated black spot, but it is normally almost or quite concealed. The five typical specimens were all labelled as having been taken on young shoots of Desert Box by W. Stalker.

SUBFAMILY ATERPIDES.

CYLLORHAMPHUS.

This genus was originally referred to the *Cryptorhynchides*. I previously questioned its right to a position there;

and the examination of two additional species of the genus now leaves no doubt in my mind but that it is close to *Æsiotes*, and consequently that it should be referred to the *Aterpides*.

Third interstice on each elytron (excluding apex) with two tubercles or ridges ... *tuberosus*
 Third interstice with more than two.
 Glabrous along middle of under-surface *mimicus*
 Not glabrous there *angustus*

CYLLORHAMPHUS ANGUSTUS, n. sp.

Black, antennæ and tarsi reddish. Densely clothed with rusty-brown, or chocolate-brown scales, becoming paler on portion of under-surface.

Head with minute, concealed punctures; with a shallow inter-ocular fovea. Rostrum rather stout, subgibbous at base; basal two-fifths with concealed punctures, elsewhere polished and with rather small but sharply defined ones. First joint of funicle as long as three following combined, second as long as two following combined. *Prothorax* slightly longer than wide, sides somewhat rounded, apical third with two strong parallel ridges, basal two-thirds with many smaller, vermiculate ridges. *Scutellum* apparently sub-oblong. *Elytra* long and narrow, about one-third wider than prothorax; with rows of large, round punctures, appearing much smaller through clothing; third interstice with a distinct tubercle near base, an elongated ridge about middle, and a small tubercle behind same; fifth with three small tubercles and a ridge conspicuously terminated at summit of posterior declivity; seventh with one or two small tubercles and a moderate ridge. *Prosternum* deeply notched in front, grooved almost to hindmargin, where there is a fairly large, semi-double fascicle. *Metasternum* elongate, with a distinct sub-apical fovea. *Femora* stout; four front tibiæ with fine, concealed serrations on the lower-surface. Length, 7-9 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 2723.

Readily distinguished from the other species by the long median ridge on the third interstice on each elytron. Although most of the scales are entirely without lustre, those on the suture frequently have a distinctly golden gloss; but frequently the suture is partly abraded. The patch of paler scales on the under-surface extends from the front of the metasternum to the apex of the first abdominal segment along the middle. On the elevated parts the scales are often subsetose in character, and cause an appearance as of fascicles. When the head has been abraded its punctures are seen to

be very small, and are normally quite concealed. The sexual distinctions are very slight, the only one that I can detect being a slight difference in the convexity of abdomen. Eighteen specimens (two taken *in cop*) were beaten from a small tree, with large, serrated, banksia-like leaves at Malanda.

CYLLORHAMPHUS MIMICUS, n. sp.

Black, antennæ and tarsi of a dingy-red. Densely clothed with rusty-brown scales, becoming paler on scutellum and on a space (sometimes subtriangular in shape) on the middle of the side of each elytron.

Head with dense, partially-concealed punctures of moderate size. Rostrum short and stout, subgibbous at base; basal three-fifths with partially concealed punctures, a ridge on each side and a less distinct one in middle; elsewhere glabrous or almost so, and with distinct punctures. Antennæ stout; first joint of funicle as long as second and third combined, second as long as third and fourth combined. *Prothorax* about as long as wide, apical third with two obtuse median ridges, elsewhere with many more or less obtuse tubercles; with dense concealed punctures. *Elytra* not very wide, subparallel-sided to beyond the middle; with rows of large, partially or entirely concealed punctures; third interstice with two tubercles about middle, and a semi-double one or ridge near base; fifth with three tubercles, and a short but distinct ridge, terminating at summit of posterior declivity; seventh with two or three obtuse tubercles; eighth with a feeble subapical ridge. *Prosternum* rather deeply notched in front, and widely depressed to front coxæ, with a narrower groove from same almost to hindmargin. *Metasternum* with a large apical fovea. *Legs* short; femora stout; four front tibiæ with small partially concealed serrations. Length, 5-7 $\frac{1}{4}$ mm.

Hab.—Queensland: Cairns district (A. M. Lea); New South Wales: Dorrigo (W. Heron). Type, I. 2724.

As in the preceding species the tubercular parts sometimes appear as fascicles; but it is readily distinguished from that species by its rostrum, elytra, and under-surface. At first glance it has quite a striking resemblance to *Orthorrhinus klugii*. There is a more or less glabrous space along the whole of the under-surface, and the scales at the sides frequently have a golden, or even a purplish lustre. From some directions the apex of the elytra appears to be terminated by four small tubercles. On one specimen there appear to be but two tubercles on the third interstice, the second and third being narrowly conjoined so as to appear semi-double. Except

for a slight degree in convexity of abdomen, I can find no sexual differences in the six typical specimens.

A small (5 mm.) specimen from the Blue Mountains (H. J. Carter) probably belongs to this species, but seems to be somewhat narrower, with dingier clothing and larger elytral tubercles.

ZEPHRYNE and allied Genera.

There is a small and interesting cluster of genera, allied to *Zephyryne*, whose species usually have tubercles or processes close to the eyes or at the base of the rostrum. The eyes themselves are laterally prominent, but usually concealed from above. They are all densely clothed, and as they live on or near the ground, and frequently under logs and stones, their clothing is frequently obscured by dried mud. They have been variously referred to several subfamilies, but as they certainly belong to but one, it seems now desirable to refer them all to the *Aterpides*.

Zephyryne. Referred to the *Rhyparosomides*.

Ophryota. Also referred to that subfamily.

Myarda. Referred to the *Aterpides*.

Aparete. Also referred to that subfamily; in Masters' Catalogue placed in error in the *Leptopsides*, as well as in the *Aterpides*.

Ethemaia. Not categorically referred to any subfamily, but by implication to the *Gonipterides*. Later it, with *Aparete* and *Medicasta*, were included in a table of *Aterpides*. In Masters' Catalogue it was referred to the *Leptopsides*.

Hyphæria. Distinguished only from *Ethemaia* by the tarsi; its position not otherwise indicated. I regard it as a true synonym of *Zephyryne*.

Medicasta. When described Pascoe said that (with *Ethemaia* and *Methypora* ⁽³⁰⁾) it belonged to a new subfamily near the *Aterpides*.

The previously described species of the group are:—

APARETE PALPEBROSA, Pasc.

ETHEMAIA ADUSTA, Pasc.; ANGUSTICOLLIS, Pasc.; APICALIS, Lea; CURTULA, Pasc.; EMARGINATA, Lea; FUNEREA, Lea; GRIFFITHI, Lea; SELLATA, Pasc.; VAGANS, Lea.

MEDICASTA ⁽³¹⁾ LEPTOPOIDES, Lea; LEUCURA, Pasc.; LUGUBRIS, Blackb.

MYARDA FERRUGATA, Pasc.

OPHRYOTA NODOSA, Blackb. (*Aparete*); RAPAX, Blackb.; SQUAMIBUNDA, Pasc.

(30) Now placed with *Molytides*.

(31) *M. obscura*, Blackb., is an *Oxyops*.

ZEPHRYNE ASSIMILIS, Pasc. (*Hyphæria*); BELTANENSIS, Blackb. (*Hyphæria*); GEOMETRICA, Lea (*Hyphæria*); PARALLELA, Blackb. (*Hyphæria*); PERSONATA, Lea; SORDIDA, Pasc.; VARIABILIS, Blackb. (*Hyphæria*).

Including a new one the genera known to me⁽³²⁾ may be thus tabulated:—

With infra-ocular lobes.

Seventh joint of funicle subadnate to club OPHRYOTA

Seventh joint distinctly separated from club ZEPHRYNE

Without infra-ocular lobes.

Claws not widely separated at apex ... PLATYPTEROCIS

Claws widely separated at apex.

Seventh joint of funicle subadnate to club APARETE

Seventh joint distinctly separated from club ETHEMAIA

ZEPHRYNE (1869).

Hyphæria (1883).

Myarada (1883) (?)

The difficulty of dealing with many of the genera proposed by Mr. Pascoe, unless the typical species of such genera are actually known, has been rather frequently commented upon. I have just been enabled to identify the typical species of *Zephyryne (sordida)*,⁽³³⁾ and find that it is quite evidently congeneric with the typical species of *Hyphæria (assimilis)*.⁽³⁴⁾ The tarsi of the former were described as having the third joint "vix lobato"; that of the latter as "integro." In each, however, the third, although not wider than the second, is slightly bilobed. In *Ethemaia* the third is usually distinctly wider than the second and more deeply bilobed.

Z. sordida has a distinct subtubercular lobe below each eye, although it was not mentioned in the original description. In *H. assimilis*, however, such a lobe was mentioned. *Hyphæria* was briefly compared with *Ethemaia*, and even referred to a different subfamily to that of *Zephyryne*. The essential features of the genus are:—Head wide, flat or

(32) As I am unacquainted with the typical species of *Medicasta* and *Myarada*, these genera were not included in the table. There is at least another genus belonging to the group, characterized by a short broad subtriangular rostrum and very prominent eyes; but its only representative before me is badly abraded and very dirty.

(33) Specimens in the Museum are from Lyndoch and Monarto.

(34) This species is widely distributed in Australia, but there are some Gayndah specimens (practically co-types as they were received from the Australian Museum, Sydney) before me.

depressed between eyes, crested close to eyes on upper-surface, and lobed ⁽³⁵⁾ just below them. Third tarsal-joint not wider than second, and rather feebly bilobed. The other characters are mostly common to the group.

Without knowing the typical species of *Myarda* it should, perhaps, be left untouched. I think it extremely probable, however, that it will eventually be merged in *Zephyryne*. The sculpture of the head, ⁽³⁶⁾ rostrum, elytra, and tarsi all point strongly in that direction.

ETHEMAIA.

The typical species of this genus is certainly *sellata*, but at the time it was described Pascoe referred to it a second species (*adusta*), in which the base of the rostrum was not strongly bilobed. The essential features of the genus amongst its close allies are:—Head without a crest immediately above each eye (although sometimes with one on each side of the base of rostrum), and without infra-ocular lobes. Eyes rather large, convex, and distinct from above. Third tarsal-joint deeply bilobed, and usually wider than second. ⁽³⁷⁾

ETHEMAIA GRIFFITHI, Lea.

Some specimens from the Clarence River and Gosford ⁽³⁸⁾ differ from the type in having the clothing of a dingy brownish-grey or muddy-brown.

ETHEMAIA ADUSTA, Pasc.

An extremely variable species that occurs on a small, thick-leaved, prostrate plant at Lucindale ⁽³⁹⁾ is probably *adusta*. It has the rostrum apparently with five ridges, but there are really six, the two median ones, however, are so close together that a very slight displacement of the clothing or a small amount of dirt causes them to look like one; the two outer ones are also often feeble, so that the rostrum appears on various specimens to have three, four, five, or six costæ. The elytra of the type were described as having "interstitiis alternis modice elevatis, declivitate singulorum

⁽³⁵⁾ The ocular lobes, however, are sometimes very feeble, but the lower-surface of the eye on such species is oblique, not circular in section.

⁽³⁶⁾ In particular the supra-ocular crests, and infra-ocular lobes, the latter mentioned in the specific description, "Eyes . . . in contact with a rounded ledge below."

⁽³⁷⁾ In *E. apicalis* the third is the width of the second.

⁽³⁸⁾ It is now first recorded from the mainland.

⁽³⁹⁾ It is so abundant there, that on the smoke of a reed-fire being driven across certain flats, the very ground appears to be moving.

quinque callosis, dorso griseo, lateribus fuscis." On the Lucindale specimens the alternate interstices are not elevated in the usual way, but at irregular intervals are supplied with feeble tubercular elevations, becoming larger about the posterior declivity.⁽⁴⁰⁾ The clothing is very variable; it is sometimes almost entirely greyish, vaguely mottled with brown, and fairly commonly is darker at the sides of the elytra than elsewhere (as on the type). Sometimes it is almost entirely sooty, but very dark specimens frequently have a wide pale fascia (dilated at the sides) crowning the posterior declivity; sometimes the elytra have a jagged irregular black blotch on the basal half, and a large dark spot on each side; and sometimes each elytron has a fairly large, isolated white spot on each side near the base. The scutellum is frequently white. The supra-ocular ciliation mentioned in the original description is not supported by tubercles, and a slight amount of abrasion causes it to disappear.

ETHEMAIA MIRABILIS, n. sp.

Densely clothed with pale, more or less stramineous scales, almost uniform on under-surface, but conspicuously variegated with subochreous and slaty-brown on upper-surface and legs. In addition with numerous stout, erect, subspathulate scales, longer on elytra (where they are in places compacted into loose fascicles), and shorter on prothorax than elsewhere; under-surface and legs with numerous, moderately long setæ.

Head depressed between eyes. Rostrum slightly longer than wide, with an obtuse ridge towards each side, terminating at base in a conspicuous tubercle. Antennæ rather short and thin; basal-joint of funicle as long as two following combined. *Prothorax* slightly longer than wide, sides feebly rounded; punctures vaguely indicated through clothing. *Elytra* suboblong, considerably wider than prothorax; punctures in striæ almost or quite concealed; apparently with feeble tubercles, supporting fascicles, about summit of posterior declivity. *Legs* moderately long; third tarsal-joint somewhat wider than second, and deeply bilobed. Length, $7\frac{1}{2}$ mm.

Hab.—Australia. Type, I. 3355.

This is the only species I have seen that could confidently be identified as absolutely congeneric with *E. sellata*; from that species it differs in having the upper-surface much more densely clothed, with considerably longer and frequently

⁽⁴⁰⁾ On the third interstice there are from four to six, and on the fifth from two to four.

erect and rather stout scales. On close examination many of these appear to be truncated at the tip, with the tip itself almost brush-like in character, or as if the scales had been split downwards. I do not remember similar scales on any other weevil. The derm is everywhere entirely concealed, and as the type is unique and in perfect condition, it has not been abraded. The palpi are quite distinct, but they may have been accidentally forced out. The type was labelled "Null" ⁽⁴¹⁾ and was from the collection of the late Rev. T. Blackburn.

ETHEMAIA ALTERNATA, n. sp.

Black, appendages obscurely diluted with red. Densely clothed with sooty-brown scales, variegated with grey; under-surface mostly with greyish scales. In addition with sub-erect stout setæ or thin scales, more conspicuous on elevated parts of elytra than elsewhere.

Head rather feebly depressed between eyes. These round and rather prominent. Rostrum about one-third longer than wide, sides but feebly dilated to base, with feeble longitudinal ridges. Antennæ rather short and thin. *Prothorax* about as long as wide, sides feebly rounded; with rather large punctures indicated through clothing. *Elytra* considerably wider than prothorax, parallel-sided except at base and apex; with regular rows of large, partially concealed punctures; suture, third, fifth, and seventh interstices conspicuously elevated, the third and fifth each with a tubercle crowning the posterior declivity. Length, 5 mm.

Hab.—South Australia: Lucindale (A. M. Lea).

The complete absence of supra-ocular crests and infra-ocular lobes exclude the species from *Zephyryne*, but the third tarsal-joint is very little wider than the second, and but moderately bilobed, so that it is also aberrant for *Ethemaia*. The sculpture of the prothorax and elytra are somewhat as in *Z. parallela*, but the head is very different. On the rostrum the clothing greatly obscures the sculpture, but there appear to be four ridges, of which the median ones are stronger than the others; but from some directions there appear to be but two, and those but feebly elevated. The strongly elevated alternate interstices, with the fifth having a single tubercle, should prevent the species from being confused with most species of the allied genera. On the type the scales on the head are mostly greyish, on the prothorax the surface is covered with alternating stripes of brown and grey, on the elytra the scales on the sides and apical third are mostly greyish.

(41) Probably an abbreviation for Nullabor Plains.

APARETE PALPEBROSA, Pasc.

The postmedian fascia on the elytra of this species is seldom distinct, and the colours of the scales generally are more or less variable.

APARETE LONGIPES, n. sp.

Black or of a dingy-brown; legs and antennæ obscurely reddish. Densely clothed with white or whitish scales, rather thickly interspersed with stout, semi-erect scales and a few setæ.

Head with dense, concealed punctures; depressed between eyes, but at the sides of each of these with a strongly elevated and rounded crest. Rostrum rather wide, with an obtuse semi-double ridge along middle, and a transverse naked ridge at apex. Antennæ short but rather thin; first joint of funicle almost as long as second and third combined, and second as third and fourth combined. *Prothorax* about as long as wide, sides gently rounded, base and apex subequal, with a vague median depression, which is somewhat dilated near base and again near apex; with very dense and normally quite concealed punctures. *Elytra* oblong-ovate, considerably wider than prothorax, shoulders armed; with rows of large, almost concealed punctures, the interstices with punctures as on prothorax; each elytron with three triangularly-placed tubercles on posterior declivity, one (the largest) on third interstice, the others on fifth. *Legs* rather long and thin. Length, 8-10 mm.

Hab.—Western Australia: Cue (H. W. Brown). Type, I. 3348.

In some respects fairly close to *palpebrosa*, but the supra-ocular crests much larger and more conspicuous; on that species the supporting tubercles of the crests are very feeble, the conspicuous appearance of the crests being due to scales, and when these have been abraded the crests almost disappear. On the present species the crests are very conspicuous even when completely abraded. The elytra also are different. The clothing is so dense that the surface, except for the claws and muzzle, is everywhere concealed. On the elytra some of the suberect scales are compacted into loose fascicles. On abraded specimens the prothorax is seen to be slightly longer than wide, on specimens in perfect condition it appears to be feebly transverse. On abrasion also the under-surface is seen to be densely transversely strigose, with punctures of moderate size scattered about. There are only four distinct tubercles on each elytron (one on the shoulder, the others posteriorly), but obtuse remnants of

others become visible on abrasion. The male differs from the female in being thinner, with somewhat longer legs and antennæ, and basal segment of abdomen flattened in middle, instead of moderately convex.

APARETE HYSTRICOSA, n. sp.

Black; parts of appendages obscurely reddish. Densely clothed with more or less slaty-grey scales, more or less conspicuously variegated on the upper-surface, but becoming paler and almost uniform on the lower. In addition with numerous stiff erect bristles; mostly black on the upper-surface, mostly pale on the under-surface and legs.

Head with dense concealed punctures; widely depressed between and behind eyes; at the side of each of these with a strongly elevated, subconical crest or tubercle. Rostrum with somewhat sinuous sides, narrowly impressed along middle, and obtusely ridged on each side of same; across apex with a transverse semi-naked ridge. Apex of scrobes conspicuous from above. Antennæ short; first joint of funicle very little longer than second. *Prothorax* about as long as wide, sides gently rounded, base slightly wider than apex, with a rather conspicuous and wide median groove; with coarse punctures readily traceable through clothing. *Elytra* oblong-ovate, much wider than prothorax, shoulders obtusely armed; with rows of large, partially concealed punctures; third interstice with two subconical tubercles, one at, the other before, summit of posterior declivity; fifth with two, one at, the other below, summit of declivity, and with traces of others. *Legs* moderately stout. Length, $7\frac{1}{4}$ -8 mm.

Hab.—Western Australia: Cue (H. W. Brown). Type, I. 3349.

Readily distinguished from the preceding species and from *palpebrosa* by the numerous long erect and usually blackish bristles scattered over the rostrum, prothorax, and elytra. On well-preserved specimens of these species there are fairly numerous stout scales rising above the plating scales, but they are true (and usually spathulate) scales, which the bristles on the present species most certainly are not. The supra-ocular crests are about the size, but not quite the same shape, and the legs are decidedly shorter than those of the preceding species. On the base and apex of prothorax, on the base of the elytra, and on many of the interstices (including the suture) there are patches or short stripes of scales, varying from ochreous to (in some lights) a glittering golden-red; on the elytra also these patches are usually accentuated by sooty ones. On the scutellum, and on most of the head

and rostrum, the scales are white. The elytral markings are suggestive of those of *Ophryota squamibunda*. On abrasion the under-surface is seen to be densely covered with small punctures, with considerably larger ones (partially visible beforehand) scattered about.

OPHRYOTA SQUAMIBUNDA, Pasc.

Although not mentioned in the original description, there is a subtubercular lobe beneath each eye of this species, and this appears to be a permanent generic feature. Of the numerous specimens before me, some of which agree well with the described markings of the type, some bear the late Rev. T. Blackburn's name label, and others were received with the name from the late G. Masters (from whom the type was received). The markings, however, are often traceable with difficulty, and are sometimes altogether absent.

Several specimens with the typical markings agree perfectly in all details with the described form, except that they have a small but distinct tubercle on each shoulder; the resemblance in all other details is so exact that they probably represent the other sex.

OPHRYOTA NODOSA, Blackb. (formerly *Aparete*).

In describing *Aparete nodosa*, Blackburn was evidently somewhat dubious as to its genus. The type is now before me, and it has a distinct subtubercular lobe beneath each eye, as on *Ophryota squamibunda*, and it certainly is congeneric with that species. Its head and rostrum are identical with those of *squamibunda*. The only structural differences I can find between it and specimens of *squamibunda* with tuberculate shoulders are on the interstices; the third on each elytron having two distinct tubercles, and the fifth having three, in each case the second of these being the larger, and crowning the posterior declivity; the one before it, although smaller, is quite distinct and fairly acute; whereas on *squamibunda* there is but a slight swelling at its position.

Two specimens from Alice Springs appear to belong to the species, and are in better condition and slightly larger than the type; they have markings somewhat as on *squamibunda*. The scales generally are of a dingy-white or stramineous; the darker ones being of a rusty colour, in places becoming sooty. Two other specimens from the Darling River and Sea Lake also appear to belong to the species, but are rather smaller. All these specimens vary somewhat in the markings and in the stout erect scales, but these appear to be easily abraded.

OPHRYOTA RAPAX, Blackb.

This species is readily distinguished from the others of the genus by a conspicuous stout spine on the spur at the apex of the front tibiæ⁽⁴²⁾; the other tibiæ are also spurred, but much less conspicuously so. There is a distinct tubercular lobe beneath each eye. Specimens are in the Museum from Central Australia (marked as a co-type), Lake Callabonna, and the Elder Expedition.⁽⁴³⁾

MEDICASTA.

The typical species of this genus is at present unknown to Australian workers. In the original description the third tarsal-joint was said to be "vix lobato," but in a figure (pl. xviii., fig. 11c) it is shown as rather deeply bilobed, and wider than the second. In a table given subsequently⁽⁴⁴⁾ it was distinguished from *Ethemaia* by "tarsi linear."

The late Rev. T. Blackburn referred two species to it. Of the first⁽⁴⁵⁾ he was somewhat doubtful, and before describing the second species he commented on the possibility of its being really a *Hypharia*.⁽⁴⁶⁾ I have myself referred one species to the genus, but am now dubious to its having been correctly placed there; there are before me several other species that are congeneric with it, but till the doubts concerning the typical species are cleared up, it appears better to leave these undescribed.

PLATYPTEROCIS, n. g.

Head short, armed between eyes. Eyes lateral, almost round, moderately faceted. Rostrum short and stout. Scrobes deep, terminated some distance in front of eyes. Antennæ short and stout; funicle with all the joints, except the first, strongly transverse, seventh subadnate to club, the latter scarcely as long as the two preceding joints combined. *Prothorax* transverse, ocular lobes very feeble or absent. *Scutellum* absent. *Elytra* wide, subcordate. *Metasternum*

(42) This spur is sometimes bifid at the apex, but frequently simple.

(43) One of the latter is marked as a co-type of *Aparete nodosa*, and its resemblance to the type of that species is extraordinary, but the spurred tibiæ are at once distinctive.

(44) Journ. Linn. Soc., 1871, p. 168.

(45) The type of this species, *lugubris*, is in the South Australian Museum; it is an *Oxyops*.

(46) The description of this species, *obscura*, reads much like that of one quite closely allied to *H. assimilis*, nor am I at all certain but that it was founded upon a specimen of that somewhat variable and widely distributed species.

short. *Abdomen* wide at base, strongly narrowed posteriorly, two basal segments large. *Legs* short and stout; front coxæ touching, middle lightly, hind ones widely, separated, femora edentate; tibiæ obtusely spurred at apex, tip fringed with short setæ; tarsi padded on lower-surface, third joint deeply bilobed but not much wider than second, claws feebly separated. Apterous.

A highly remarkable genus of doubtful position; but on account of the inter-ocular crests and seventh joint of funicle subadnate to club may be placed near *Ophryota*. The head bears a certain resemblance to some genera of the *Euomides*, but the funicle is seven-jointed,⁽⁴⁷⁾ and the mouth-parts and tarsi are different. From the *Leptopsides*, to which it possibly should have been referred, the almost complete absence of ocular lobes may perhaps be distinctive, the sides of the prothorax are very faintly sinuous, but I do not think that ocular lobes could fairly be regarded as being present. The subapproximate claws would appear to denote an approach to *Polyphrades*, but no species of that genus has a crested head. Messrs. Feuerheerdt Bros. and F. Secker have taken a fair number of specimens under fallen eucalyptus leaves.

PLATYPTEROCIS PARADOXUS, n. sp.

Black. Densely clothed with light-brown scales, more or less conspicuously variegated with whitish and sooty patches.

Head with derm entirely concealed; with a strong conical tubercle close to each eye. *Rostrum* short, dilated, and deepened to near apex, narrowly impressed along middle, obtusely transversely crested between antennæ, thence vertical to mandibles. *Scape* stout, increasing in width to apex, almost as long as funicle. *Prothorax* moderately transverse, sides strongly rounded, and widest slightly nearer apex than base; surface with partially concealed granules and vermiculate elevations. *Elytra* conjointly arcuate (except for slight interruptions by the interstices) at base, sides rather strongly rounded to beyond the middle, and then arcuate to apex; with irregular rows of partially concealed punctures; interstices uneven, and in places with obtuse more or less concealed granules.

Hab.—South Australia: Lucindale (Feuerheerdt Bros. and F. Secker). Type, I. 3362.

The markings are not exactly alike on any two specimens in the Museum, but on the elytra there are rather large and more or less round spots of whitish scales (usually with

(47) The funicle might almost, however, be regarded as six-jointed, as the seventh is very indistinctly separated from the club.

a vague bluish tinge) becoming condensed into an irregular fascia at summit of posterior declivity; on most of the declivity the scales are sooty, but there are usually some conspicuous white spots about the suture. The abdomen is usually vaguely striped, and the legs more or less conspicuously ringed. But, as with other terrestrial weevils, the markings are frequently obscured. There is a slight difference in the convexity of abdomen between some specimens and others, but no other differences, likely to be sexual, are apparent.

SUBFAMILY HYLOBIIDES.

ORTHORRHINUS BICOLOR, Blackb.

Two specimens (marked as co-types) standing under this name in the collection of the late Rev. T. Blackburn are simply abraded specimens of one of the numerous varieties of *O. aethiops*.

SUBFAMILY ERIRHINIDES.

MISOPHRICE.

Specimens of this genus are probably to be taken in all parts of Australia where trees or shrubs of the genus *Casuarina* (sheoaks and bulloaks) occur. I have never yet failed to obtain them when looking for same, and am now able to extend the known range of the genus to Cairns, in Northern Queensland, and to Kangaroo Island, in South Australia. No species as yet has been recorded from Central and North-western Australia or from the Northern Territory; but this is almost certainly due to the fact that they have not been specially looked for there, as probably of all the minute plant-eating Australian weevils they are the most readily overlooked; despite the fact that they frequently occur in abundance at all times of the year.

The scales vary on several species from brilliantly metallic-green or golden to an opaque-white or bluish-grey. The sexes vary in the abdomen and rostrum.

MISOPHRICE GLORIOSA, Lea.

Mr. Griffith has taken, near Adelaide, numerous specimens of the Variety A of this species; but some of these have the legs distinctly reddish.

Variety C. A specimen, taken near Adelaide by Mr. Griffith, has the elytra densely clothed with sooty scales, except for a few dingy whitish ones about base, and some more about basal third. But on the sides, more especially beyond the middle, there are some white scales with a coppery gloss. Most of the scales on the head and prothorax are also sooty.

It should perhaps be regarded as an extreme form of the Variety A.

Variety D. A specimen from Northern Queensland (Blackburn's collection) has the scales on the upper-surface mostly of a silvery-white, with a slight coppery gloss. Apparently there are no sooty scales present, but the pale scales are less numerous than on the typical form. At the summit of the posterior declivity there is a nude space on each side, causing an appearance as of two distinct black spots. A specimen on the same card has the elytral spots much less conspicuous, and the scales on the upper-surface mostly coppery-green, and on the lower surface greenish-blue. These specimens have a strong superficial resemblance to *Micraonychus rufimanus* of the *Cryptorhynchides*.

Variety E. Two specimens from Lucindale (South Australia) are densely clothed on the body and legs with silvery-white scales, with a few faintly golden ones scattered about. There are no sooty scales on the elytra, but portion of the suture is glabrous.

Variety F. Numerous specimens from Mount Tambourine (Queensland) may be provisionally treated as a variety. They are unusually small ($1\frac{1}{4}$ - $1\frac{1}{2}$ mm.), and entirely without sooty scales. The clothing on the upper-surface varies from an opaque-blue to coppery-green, or golden, and is denser on the suture (except about base, which is almost or quite glabrous) than elsewhere.

MISOPHRICE VICINA, Lea.

This species has recently been taken at Mittagong, in New South Wales, thus extending its range from Tasmania to the mainland. A specimen from Sydney also appears to belong to the species, but has the elytral spots scarcely traceable.

MISOPHRICE VARIABILIS, Blackb.

This is the most variable species of the genus, specimens differing in size, colour, and clothing to a remarkable degree. The male is usually smaller and darker than the female. Some males have the under-surface entirely dark, and the elytra dark, with two ill-defined stripes on each side, where the derm is obscurely diluted with red. The prothorax is sometimes entirely black in the male, but it is usually more or less obscurely diluted with red. In the female it is frequently black at the apex only. On each elytron the tip of the fifth interstice (immediately behind which the fourth and sixth meet) is always dark, sometimes just perceptibly darker than the adjacent parts, but frequently the dark part

is continued almost to the base and to the sides of the adjacent interstices. The head is always black, but the rostrum varies from a rather bright-red to a dark-brown. The abdomen of the female is entirely pale; in the male it is sometimes entirely pale, sometimes entirely dark, and sometimes more or less deeply stained with black at the sides.

The clothing of the elytra is of two kinds; pale depressed stout setæ, on the larger specimens having a distinctly spotted appearance; and short and dark suberect setæ, indistinct from above, but very distinct from the sides. On the other parts of the body the clothing is white, or silvery-white, sometimes with a golden gloss. Green scales are apparently always absent.

The prothorax is comparatively smaller, and the elytra decidedly larger, than in others of the genus. The elytra are decidedly wider than the prothorax at the base, and dilate hindwards (more noticeably in the female than in the male) till attaining their maximum width at about the apical third, where the width is about double that of the prothorax in the female, and almost double in the male.

On Mount Lofty Mr. S. H. Curnow took numerous specimens that apparently belong to this species, but differ in being considerably smaller ($1\frac{1}{2}$ - $2\frac{1}{4}$ mm. as against $2\frac{1}{4}$ -4 mm. of normal specimens) and with the elytral markings consisting of a single spot on each side, usually rounded, and never extending more than one-third of the distance to the base. The elytral clothing is of two kinds, as on the normal forms, but the pale setæ are regularly disposed, instead of forming more or less distinct spots.

On Kangaroo Island I recently took numerous specimens very similar to the Mount Lofty ones in size and general appearance, but with the clothing much sparser, and semi-erect setæ almost absent from the elytra. One specimen from the island has the sterna entirely pale, but this may be due to immaturity.

MISOPHRICE MUNDA, Blackb.

A specimen from Lawson (New South Wales) probably belongs to this species, but differs from a Western Australian one⁽⁴⁸⁾ under examination in being slightly larger, the scales on the head and prothorax somewhat golden, instead of green (a common variation in the genus), and the sides of the elytra more conspicuously covered with green scales.

(48) This specimen agrees well with the original description; the type was unique in the late Rev. T. Blackburn's collection, and is now in the British Museum.

MISOPHRICE SETULOSA, Blackb.

The Tasmanian specimens, which with some doubt I previously⁽⁴⁹⁾ referred to *setulosa*, have since been compared with some co-types of that species, and agree with same.

MISOPHRICE SQUAMIBUNDA, Lea.

The type of this species appears to be a rather small female. I have recently taken numerous specimens of the species at Bluff (Queensland) ranging in length from $1\frac{3}{4}$ to 3 mm. The species is allied to *crisatifrons*, but it is more densely clothed, inter-ocular crest more feeble in the male, and practically absent from the female. One specimen has the scales paler than elsewhere on the suture, on the fifth and seventh interstices about the base, on the second, fourth, and sixth beyond the middle, and on the third near apex; on some of the others these markings can be discerned with difficulty, but the suture is always clothed with whitish scales. On the under-surface the scales are frequently coppery-green or bluish. On the prothorax there are some scattered dark scales.

A female from Aloomba (Queensland, Blackburn's collection) is unusually small ($1\frac{1}{2}$ mm.), and the pale scales on the upper-surface have a slight greenish tinge. Two large ($2\frac{1}{2}$ -3 mm.) specimens, from Mount Tambourine, have the majority of the scales on the upper-surface of a pale smoky-brown, with the pale markings on the elytra very conspicuous. On the prothorax also there are three pale longitudinal stripes. On the under-surface and legs most of the scales have a pale-greenish gloss.

MISOPHRICE NIGRIPES, Lea.

Numerous specimens from Mount Lofty and Kangaroo Island appear to belong to this species. The Kangaroo Island ones agree perfectly with the types, but the others are somewhat larger, and resemble the Variety B. Numerous specimens from Mittagong also appear to belong to the same variety.

Variety C. Numerous specimens, taken by Mr. C. Gibbons near Sydney, appear to represent another variety. Their scales nearly all have a beautiful golden gloss, on a few merging to golden-green, especially on the legs and under-surface.

MISOPHRICE PARALLELA, Blackb.

This species was described from a single specimen from Port Lincoln. Subsequently I sent numerous specimens from

(49) Trans. Roy. Soc., S.A., 1906, p. 79.

Sydney to the late Rev. T. Blackburn that were identified by him as belonging to the species, and some of these are still in his collection labelled as *parallela*. In the description he says "squamis pallidis (certu adspectu subcupreis) vestita, his in elytris seriatim dispositis, in prothorace . . . sat piliformibus." In his table of the species he says "elytra scarcely, if at all, wider than prothorax." The specimens now standing under the name in his collection, however, have the elytra slightly but distinctly wider than the prothorax.

I have previously had mixed with *parallēla*, and have doubtless distributed as such, specimens of a closely-allied species, now named *soror*, which differs in having the elytral clothing of a similar nature to that of the prothorax, instead of in the form of fairly stout setæ.

MISOPHRICE SQUAMIVENTRIS, Lea.

Variety A. Mr. Griffith has taken, near Adelaide, numerous specimens of this species, but differing from the typical form in having almost all the scales on the upper-surface of a brilliant golden colour, sometimes with a rosy gloss. On the sides of the under-surface and on the legs many of the scales also are golden, but rather less decidedly so. The white scales on the elytra on several specimens appear like a fascia in the middle, with the fascia bifurcating at the fifth interstice; but generally have a somewhat zig-zag appearance, as on the type.

Variety B. Two specimens, from Kangaroo Island, have the scales on the upper-surface mostly of a rather obscure coppery-green or dull-green, mixed with silvery-white. On the under-surface most of the scales are of a silvery-blue, but with here and there a brilliantly golden one.

MISOPHRICE CLATHRATA, Lea.

Numerous specimens of this species have recently been taken at Adelaide, Mount Lofty, and Port Lincoln. Some of these have the prothorax obscurely diluted with red.

MISOPHRICE TUBERCULATA, n. sp.

Dull reddish-brown, antennæ and apex of rostrum paler. Moderately densely but somewhat irregularly clothed with white or whitish scales.

Rostrum rather long and moderately curved, basal half with fine ridges and numerous partially concealed punctures; elsewhere shining and with a few small punctures in feeble rows. *Prothorax* almost as long as wide, sides gently rounded, base somewhat wider than apex; with dense, round

punctures. *Elytra* distinctly wider than prothorax, parallel-sided to beyond the middle; with rows of fairly large, partially concealed punctures; fifth interstice with a distinct subconical tubercle half-way down the posterior declivity, the third with a smaller and more depressed one at summit of same. *Legs* comparatively long. Length, $3\frac{3}{4}$ - $4\frac{1}{2}$ mm.

Hab.—South Australia: Kangaroo Island (A. M. Lea); New South Wales: Sydney (Australian Museum). Type, I. 2080.

Readily distinguished from all others of the genus by its tuberculate elytra. *Squamosa* is stated to have the elytra "a little callous where the fifth, sixth, and seventh interstices terminate," but also has a "nearly straight rostrum" and other differences from the present species. The scales are denser on parts of the under-surface than elsewhere. On the elytra they are rather thin in places, and here and there are slightly infuscated, giving the surface a slightly mottled appearance. On the prothorax, head, base of rostrum, and legs the scales are thin or setose in character. The scales sometimes have a silvery gloss, and on the head are sometimes golden. Two of the typical specimens have the two basal segments of abdomen more convex than on two others, but I can find no other differences that are likely to be sexual.

MISOPHRICE INSULARIS, n. sp.

Black. Clothed with metallic-green scales.

Rostrum about the length of prothorax and moderately curved; basal half with fine ridges and rows of punctures, the latter continued to apex, but very small in front of antennæ. *Prothorax* feebly transverse, sides rounded, base wider than apex; with dense, partially concealed punctures. *Elytra* distinctly wider than prothorax, parallel-sided to beyond the middle; with rows of rather large, partially concealed punctures. Length, $1\frac{3}{4}$ mm.

Hab.—South Australia: Kangaroo Island (A. M. Lea). Type, I. 2081.

Of the build of *gloriosa*, but with more uniformly coloured scales. On that species the scales appear to be in two almost regular rows on most of the interstices, and certainly so on the second and third. On the present species the individual scales are more transverse, and the second and third interstices each have but a single row, as have most of the others. From *griffithi*, which has scales arranged somewhat as on *gloriosa*, it differs also in being rather more robust, and the scales on the under-surface less brilliantly metallic than on the upper. Its legs and antennæ are also black. The clothing is alike on the two typical specimens (whose sex is

doubtful), and on the upper-surface consists of green scales, with a slight golden lustre. On the prothorax the scales are smaller than on the elytra, and towards the middle change to setæ. On the under-surface and legs they are mostly bluish.

MISOPHRICE SOROR, n. sp.

Black. Moderately clothed with white setose scales.

Rostrum long, thin, and moderately curved; basal ridges very feeble, but with distinct rows of punctures, becoming very small in front. *Prothorax* feebly transverse, sides feebly rounded, base not much wider than apex; with numerous partially concealed punctures. *Elytra* at base slightly wider than prothorax, sides feebly dilated to beyond the middle; with rows of rather large punctures. Length, $1\frac{1}{4}$ - $1\frac{3}{4}$ mm.

Hab.—South Australia: Mount Lofty (S. H. Curnow), Kangaroo Island, Port Lincoln; New South Wales: Sydney; Tasmania: Hobart, Launceston (A. M. Lea). Type, I. 2082.

I have long had specimens of this abundant species mixed with *parallela*, but they differ in being slightly less robust, and the clothing on the elytra similar to that on the prothorax, instead of in the form of distinct scales. The clothing, although adpressed, is more setose than squamose in character, and is usually of an opaque-white, although on some specimens vaguely greenish or bluish. On some specimens from certain directions a few golden scales appear scattered about on the sides. The female has the elytra more dilated posteriorly than in the male, whose elytra are sometimes almost parallel-sided; her rostrum is also slightly longer, with smaller punctures, and abdomen more convex.

MISOPHRICE BLACKBURNI, n. sp.

Black; scape, basal-joints of funicle and legs reddish, tarsi darker, rostrum obscurely diluted with red; elytra reddish, but infuscated at base, suture, and sides, and with a conspicuous transverse dark spot beyond the middle, extending from suture to fifth interstice; a vague spot on each side also nearer the apex. Clothed with white or whitish sub-setose scales.

Rostrum long, thin, and rather strongly curved; basal half with five ridges; with rows of punctures concealed about base, and becoming very fine towards apex. *Prothorax* lightly transverse, sides moderately rounded, base very little wider than apex; punctures fairly dense, but mostly concealed. *Elytra* distinctly wider than prothorax, parallel-sided to beyond the middle; with rows of rather large

punctures, in places concealed. Two basal segments of *abdomen* feebly depressed in middle. Length, 2-2 $\frac{1}{4}$ mm.

Hab.—Northern Queensland (Blackburn's collection)
Type, I. 2083.

In some respects close to *apionoides* and *vitiata*, but elytra more parallel-sided, spots larger, clothing denser, and abdomen black; *carteri* is differently clothed, and with elytral spots longitudinal instead of transverse. The clothing is denser on the sides of the sterna than elsewhere; on the elytra it is somewhat irregularly distributed, but rather dense on the third interstice, except at the dark postmedian spot. From certain directions most of the scales have a vague golden lustre.

MISOPHRICE RUFIVENTRIS, n. sp.

Black; femora, tibiæ, and abdomen reddish, elytra reddish, base, suture, sides, and a subapical spot on each side infuscated; rostrum and antennæ in parts obscurely diluted with red. Moderately clothed with whitish subsetose scales, in places with a golden lustre, denser and more squamose in character on sides of sterna than elsewhere; middle of under-surface glabrous or almost so.

Rostrum much as in preceding species. *Prothorax* distinctly transverse, sides rather strongly rounded, base distinctly wider than apex, punctures more or less concealed. *Elytra* at base distinctly wider than prothorax, sides almost parallel to beyond the middle; with rows of rather large punctures, partially concealed in places. Two basal segments of *abdomen* widely flattened in middle, the apical one with a small fovea. Length, 2 $\frac{1}{4}$ -2 $\frac{3}{4}$ mm.

Hab.—Northern Queensland (Blackburn's collection).
Type, I. 2084.

In colour much like some forms of *variabilis*, but elytra less dilated posteriorly (although not quite parallel-sided), and with the rostrum distinctly longer, thinner, darker, and more curved. In many respects close to *carteri*, but more densely clothed and abdomen entirely pale. From the preceding species it differs in the elytral markings being longitudinal instead of transverse, and in the pale abdomen. The subapical spot on each elytron is somewhat elongated, and is on the fifth interstice, but partly also on the fourth and sixth. The basal infuscation is subtriangularly advanced on the suture. One specimen has the abdomen somewhat infuscated on the sides.

MISOPHRICE BREVISETOSA, n. sp.

Black, rostrum (tip excepted), antennæ (club excepted), legs, abdomen, and most of elytra more or less reddish. Head,

prothorax, a basal triangle on elytra, and sterna with rather dense green scales; rest of elytra, abdomen, and legs with depressed, whitish setæ, with a greenish tinge; elytra and legs with rather dense, erect, short, whitish setæ.

Rostrum moderately long, thin, and curved; base with rows of punctures, separated by feeble ridges, elsewhere with rows of small punctures only. *Prothorax* moderately transverse, sides rather strongly rounded, base somewhat wider than apex. *Elytra* distinctly wider than prothorax, almost parallel-sided to beyond the middle; with rows of fairly large, partially concealed punctures. Length, 2 mm.

Hab.—Northern Queensland (Blackburn's collection). Type, I. 2085.

In size, colour, and general appearance much like many specimens of *submetallica*, but elytra with numerous regularly disposed upright or semi-upright setæ, in addition to the scales. In *submetallica* the elytra, when viewed from the sides, appear to be entirely without upright setæ, whereas in this species, when so viewed, they are seen to be very numerous, although short. *Setulosa*, which has somewhat similar setæ, is a shorter and more compact species, with the funicle darker than the scape and with more of the elytra dark, and the suture and usually the fifth interstice (and sometimes the third as well) more densely clothed than the other interstices, whereas in the present species no interstice is more densely clothed than another. The antennæ are paler than the rostrum, but with the club dark; the tarsi are not infuscated. A subtriangular basal space on the elytra is dark, but the suture and sides are very feebly infuscated.

MISOPHRICE DUBIA, n. sp. (or var. of *munda*).

Black; apex of scape, base of funicle, femora, tibiæ, abdomen, and most of the elytra reddish; rostrum black or obscurely diluted with red. Clothed with green or blue scales, sometimes almost white.

Rostrum comparatively short (scarcely as long as prothorax) and moderately curved; basal half with distinct punctures separated by ridges, elsewhere with smaller punctures and without ridges. *Prothorax* comparatively small, base distinctly wider than apex; punctures more or less concealed. *Elytra* at base distinctly wider than prothorax, sides moderately dilated to beyond the middle; with rows of rather large punctures, in places partially concealed. Length, $1\frac{1}{2}$ - $1\frac{4}{5}$ mm.

Hab.—Northern Queensland and Aloomba (Blackburn's collection), Dalby (Mrs. F. H. Hobler), Gayndah; South

Australia: Adelaide; Tasmania: Swansea, Launceston (A. M. Lea). Type, I. 2086.

Two specimens of this species were previously somewhat doubtfully identified as abraded specimens of *setulosa*; but numerous (over fifty) fresh ones now convince me that the entire absence of short erect setæ from the elytra is the normal condition of the species, and by this character it may be distinguished from *setulosa*. *Submetallica* is a decidedly larger species, with much paler elytra; *dissentanea*, from Western Australia, is rather close, but differs in the colour and clothing of prothorax; *clathrata* is a smaller and more regularly-clothed species. The description of *munda*, from Western Australia, agrees well with it, but it differs from a Western Australian specimen now before me (and which certainly is *munda*) in being distinctly wider, and with the elytra slightly dilated posteriorly; the pale parts are also more brightly reddish. The suture, sides, and a subtriangular portion of the base of the elytra are black or infuscated, and on the dark parts the clothing is denser and more squamose in character than on the pale parts, which are frequently glabrous, but usually with rather sparse depressed setæ. The middle of the metasternum and of the abdomen is glabrous, the rest of the under-surface usually being clothed with bluish scales, even when those on the upper-surface are green. The scales on some specimens have a distinct glitter. They appear to be very easily abraded, many specimens having the upper-surface wholly or partially glabrous. The sexes are very feebly defined; the female is usually slightly larger and wider than the male, the rostrum slightly longer, and abdomen more convex. The specimens (two) from Adelaide, have the elytra more brightly reddish than usual, and many of the scales of a glittering green.

MISOPHRICE INCONSTANS, n. sp.

Black, some parts more or less obscurely reddish. Rather sparsely clothed.

Rostrum moderately long, thin, and curved; punctures and ridges much as in preceding species. *Prothorax* and *elytra* somewhat as in that species. Length, $1\frac{1}{4}$ - $1\frac{1}{2}$ mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 2087.

A somewhat variable species. The elytra are usually of a dingy brownish-red, with the suture and a fairly large subtriangular basal space black, but sometimes they are much darker, so that the sutural and basal markings are very ill-defined. The abdomen and legs (but the tarsi are always dark) also vary from a dingy reddish-brown to black, but

the abdomen is never of a bright-red. The apical portion of scape and basal portion of funicle are usually paler than the rest of the antennæ. From the preceding species it differs in being smaller (the difference in this respect is not much, but with a long series of both species before me it is at once evident), with elytra, abdomen, and legs much darker, and the elytra somewhat narrower at the base. The prothorax also is a trifle longer than in that species. The sexual differences are much the same. In general appearance close to *nigriventris*, but elytra narrower, and at the base less noticeably wider than the prothorax; *cylindræa* is much closer to it in general appearance, but has the rostrum decidedly longer and thinner; *clathrata* is a somewhat smaller species, with paler elytra and abdomen; *nigripes* is smaller, with darker legs, etc. The clothing consists of rather sparse setose scales or setæ, usually of a dull-whitish colour, but sometimes of a dull-blue or dull-green; but frequently there are a few glittering green or golden scales on the sides and legs. Numerous specimens were beaten from casuarinas in a "pocket" of the scrub near Yungaburra.

ENCOSMIA CORNUTA, Blackb.

I have seen a fair number of specimens of this species from Tasmania, Victoria, and New South Wales. On each elytron immediately below the fascicle there is a spot of ochreous or golden scales, connected with the apex by a short stripe; close to each shoulder at the base is a rounded spot of similar scales, and there is a spot on each side of the base of the prothorax, adjacent to the subhumeral one.

SUBFAMILY CRYPTORHYNCHIDES.

TYRTÆOSUS SIMULATOR, Lea.

This name was recently⁽⁵⁰⁾ used in error for *imitator*.

CAMPTORRHINUS INORNATUS, Lea.

There is a specimen of this species in the Western Australian Museum from the Montebello Islands (North-western Australia).

SUBFAMILY COSSONIDES.

HALORHYNCHUS CÆCUS, Woll.

Mr. H. H. D. Griffith and I have taken specimens of this species at the roots of plants on sand-dunes at Henley Beach, near Adelaide, and on Kangaroo Island. It is the first blind beetle to be recorded from South Australia.

(50) Trans. Roy. Soc., S.A., 1913, p. 337.

CHRYSOMELIDÆ.

SPILOPYRA STIRLINGI, n. sp.

Purplish-brown, in some lights with fiery-red or brassy reflections. Front and base of head, base, apex, and margins of prothorax, scutellum, shoulders, and a spot between each and suture, a complete antemedian fascia, the suture thence to apex, a postmedian fascia not quite extending to suture, margins thence to apex, much of under-surface and of legs of a brilliant golden-green, in some lights appearing bluish or purple. Legs partly of a deep-red. Antennæ and palpi flavous, but apical-joint of the former black.

Head shallowly depressed along middle, with a few small punctures. Antennæ extending to hind coxæ, the first six joints with a waxy gloss, the others opaque. *Prothorax* with a few strong punctures at base and sides. *Elytra* distinctly depressed and with distinct punctures at antemedian fascia. Length, 8-9 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type, I. 2731.

Two specimens of this gorgeous beetle, certainly the finest taken on a recent trip to Queensland, were beaten from some shrubs at Yungaburra. Not much notice was taken of them at the time, as they were thought to be *sumptuosa*, otherwise considerable time would probably have been spent in looking for others. It differs from *sumptuosa* in being smaller, elytra with two fasciæ (one incomplete) instead of three (two incomplete), antennæ longer, and very differently coloured, and punctures sparser. The species is dedicated to Dr. E. C. Stirling, till recently Director of the South Australian Museum.

EXPLANATION OF PLATE XVI.

- Fig. 1. *Ægus jansoni*, Boileau.
 ,, 2. ,, *subbasalis*, Lea.
 ,, 3. ,, ,, ; head and prothorax of female.
 ,, 4. *Eucarteria floralis*, Lea.
 ,, 5. ,, ,, ; head of female.
 ,, 6. *Callirhipis cardwellensis*, Blackb.
 ,, 7. ,, *reticulata*, Lea.
 ,, 8. ,, ,, ; teratological antenna.
 ,, 9. *Camponotiphilus fimbriicollis*, Lea.
 ,, 10. *Sitarida scabriceps*, Lea.
 ,, 11. ,, ,, ; side view of head and prothorax.